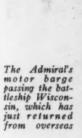
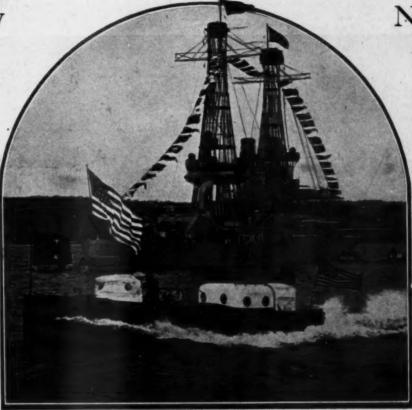
Victory

Number





Contents February 1919

Vol. XXIII



No. 2

Motor Boats and Motor Yachts Which Fought for Their Country
Small Boat as Well as Large Boat Sailors
American Chasers Destroy an Austrian Base

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GREAT LAKES

1919 Model Family Express Cruiser

A NEW model for 1919—the culmination of past experience—the bringing together of the results obtained with previous models. A boat which represents the utmost obtainable in design, equipment and comfort.

A Fifty-Two Foot Express Cruiser with a cruising speed of 20 M.P. H. Yet an out and out Family Boat. Completely equipt throughout, down to the last little intimate detail.

The layout of the boat—crew's quarters, galley, forward stateroom, engine room and bridge deck, owner's stateroom, after cockpit—is ideal from the standpoint of comfort and convenience.

Such essentials of real comfort as running water; electric lights: full ventilation: screens; wilton carpets: silk hangings: deep box spring berths, handsomely upholstered are integral parts of this boat.

GREAT LAKES BOAT BUILDING CORP. - Milwaukee, Wis.

This new model boat typines the latest development in design, equipment and efficiency. We offer quick deliveries of completely equipt boats.



An illustrated brochure describing and illustrating this 52-Foot Standardized Family Cruiser will gladly be mailed upon request.



Photograph by Edwin Levick

The Yachtsmen Did It

When the Call to Colors Came Boating Men from All Parts of the Country Responded and Offered Their Own Services as Well as Their Boats

THIS Victory Number of MoToR BoatinG we dedicate to the yachtsmen and motor boatmen who responded to the call of their country and joined the Naval Forces to make the seas Safe for Democracy. The name of these brave and patriotic men is legion.

From all walks of life these yachtsmen came,—men

From all walks of life these yachtsmen came,—men trained on the inland waterways as well as those familiar with navigation along our rockbound coast lines, sailors trained on small boats and those trained on the largest motor yachts afloat. Young men whose experience consisted of only a few weeks a year paddling or sailing a canoe offered their services to Uncle Sam who accepted them as generously as though they had served a life time in the Navy. Even the rocking chair fleet and those who had never smelled of salt water or set foot aboard a boat of any kind except an occasional ferry-boat or passenger steamer, but were sure that the love of the sea lay dormant within themselves, volunteered their services and from the ranks of this latter class many of the best and most efficient officers and men have been developed.

Many of the yachtsmen who volunteered and joined the Navy were particularly well trained for the work but the greater proportion of them were untrained. Those who were trained and qualified found important work for them at once. Many such men were used to drill and instruct the untrained. Those who were untrained when they entered the service did not remain so long.

The record of the organization work which was left to some of the yachtsmen in the Navy is a most wonderful one. In almost less than no time, training and instruction camps were established, headed by ex-yachtsmen who brought the whole personnel up to such a state of efficiency that trained officers were produced from those who entered the ranks as second class seamen and knew little

or nothing of navigation, seamanship or naval regulations, almost before the navy officers were ready for them.

Yacht clubs almost without number offered and turned their quarters and club houses over to the Government to be used as training stations or naval bases. Whole memberships, in some instances, volunteered their services for any work which the Government might assign them.

Owners of costly motor boats and motor yachts offered to give outright or loan without charge their craft to the Navy Department for patrol work to combat the sly U-boat which promised to be prowling off our coast before long. Thousands and thousands of motor boats were offered and pronounced O. K. and available by the Navy officials. A record of all of these is now on file at Washington.

Altogether 482 motor vessels were taken officially into the Navy. Of this number, 172 were purchased outright by the Government, 282 were loaned by their owners at \$1 per month, 16 were chartered and 12 were lost. A complete record of the motor boats in the service will be found on pages 36, 38, and 40 of this issue.

We have endeavored to record in this Victory Number of MoToR Boating a complete list of the members of all yacht clubs who entered any branch of the Naval Service. Some 200 clubs are recorded and if yours is omitted, it is because your officials failed to reply to any of the three letters which we addressed to them for information as to the war record of their fellow club members.

The war service record of many yachtsmen is published in this issue. We regret that we could not include a complete story of each and everyone's participation in the great struggle but many club members are still overseas and could not be reached before we were obliged to go to press. These will be included in the next issue.



The crew of sub-chaser 293, three officers and twenty-three men

Submarine Chasing

Some of the Many Duties Which the Officers and Crews of Our Small Motor War Ships Had to Perform in the Course of Service at Sea

By Ensign Arthur H. Middleton, U. S. N. R. F.
Commanding Officer S. C. 293.
Photographs by International Film Service

ID you ever hear of Submarine Chaser Squadron Eleven? Probably not, unless you are connected with

the heavy seas? Could they hold enough power to drive them at any speed? How would they combat a sub-

the Navy Department, or are a resident of Brooklyn, N. Y. At the outbreak of the war, this country sought a quick and easy means to destroy the submarine. So the Bureau of Construction and Repair, with the aid of several prominent yachtsmen, designed and equipped 350 small speedy boats. They were built to chase the submarine, and from their purpose drew their name. At first they were equipped, manned, and sent into foreign waters, as soon as they were commissioned.

Then one day the German sub-marine appeared off our shores Twenty-five chasers were awaiting orders to proceed to the other side. They were immediately ordered out to hunt the subs on this coast. The majority of the troop convoys, and supply convoys leaving for the other side, left from New York Har-bor. These craft were valuable convoy ships; so with the German submarines outside of New Harbor, and the main traffic east leaving from there, it was only logical for the department to take these twenty-five submarine chasers and base them just outside of New York, calling them Submarine Chaser Force, Squadron Eleven.

The motor boating public were at first dubious as to their usefulness. All kinds of questions arose. Could they stand up, under the daily grind? Were they going to be able to stand

Life on a chaser has its joyous moments, too. The boys are leaning on a depth bomb containing 100 pounds of TNT and powerful enough to blow up any battleship afloat

? How would they combat a submarine if one did show up? And so they were criticized and it was left to the young men of America

to take them out, put them to every test possible and prove their worth. One boat at first would have its troubles. The next one would prove efficient. To really test out these boats and find the results attained it was necessary to search the records of different groups. When the real facts were shown they were appalling. Submarine Chaser Squadron Eleven shows that all ships of that squadron were at sea, and by that they mean the Atlantic Ocean, seventy-five per cent. of each month. Some of the ships would remain out an entire month. Others, twenty-five and twenty-six days at a

Those who took one-day trips on these craft marveled at the way the hardy young men stood up under the hardships they had to undergo. They had a hard time understanding how a gasoline engine could stand such pounding, but still harder to see how the human body could stand the strain these men were under. The boats would roll so that for days it was impossible to keep food on the stove; and on every trip in some of the crew were taken to the hospital, but they were always willing to go out the next trip and take another whack at Fritz's sub-

The speed of the chasers lived up to all expectations of the designers. They were assigned to convoy duty. Some of the troop ships they had to convoy could average twentyseven knots. They usually ran these convoys at a speed of eighteen knots, and the chasers went right along with them. From the bridges of the larger ships these small craft at sea resembled a buoy. And many a man stood on the decks few depth charges count on giving battle to a submarine armed with a 6-inch gun, torpedoes and mines? All contended that the submarine could stage an old-fashioned massacre. "The chasers would not have a chance," so the wise ones declared. Yet the Navy Department gives the credit to the chasers for six of the ten German submarines sunk. They sank more than the destroyers or any other kind of craft. They were cheap to con-

kind of craft. They were cheap to construct and still cheaper to operate. "Well, how did they do it," all have



The 110's were excellent sea boats and able to give account of themselves in all kinds of weather

of the large ships and wondered at the life of the men on the submarine chasers. Day after day they drove their engines at top speed and only minor repairs were necessary. Repairs that for the most part were made while underway by the ship's crew. And these craft and their engines, after the duty had slackened up, were still in good condition. The seas did not cut down their speed as was expected, but in heavy weather they kept up with and passed much larger ships. And Photograph by C. N. Stahl

larger ships. And when all other ships put into port, because of the storms the S. C. boats remained at sea. They have yet to see the weather they cannot outride.

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Long before they actually came into contact they had proven their seaworthiness, their speed, and that they could stand the steady grind. But even yet they were criticized as offensive and defensive boats. How could a 110-footer with only a 3-inch gun and a



Firing the depth bomb from the Y-gun. A hit is shown on page 10

A semaphore signal is sent from the top of the pilot house

asked, "and how was it possible to navigate them, rolling as they do?"

To the boys operating these boats, it is like playing a game. These boats are equipped with many new inventions. Each chaser is equipped with a radio telegraph, as well as a radio telephone, the latter having an operating radius of

twenty-five miles. They are also equipped with three tubes, for lowering in the water to detect the presence of the submarine. The "K" tube can be lowered over the side in two minutes, and a submarine underway can be heard for a distance of thirty miles. So that the chaser had the advantage of knowing that there was a submarine within that distance and knowing the exact direction of the submarine as well. The disadvantage of the "K" tube is the

A depth bomb explodes causing sure destruction to any sub in the vicinity

bottom in order to keep from being detected. With these devices so arraigned that they knew the whereabouts, speed, and course of the submarine, the chaser had nothing to fear, even though her battery was lighter than that of the submarine. The chasers depended more on locating the submarine and dropping a depth bomb on it, than they did on engaging it on the surface. And then again the pessimist comes forward knocking the tubes and asking how it is possible to determine the exact position at any given time, the course she is steering, and the speed of the submarine while it is submerged.

It is not only a simple method, but very exact. Three chasers work together, running abeam of each other at say 800 yards. All the chasers stop, lower their tubes and get a bearing of the submarine. The two wing boats transmit their bearings of the submarine by wireless telephone to the center boat, which always is the flagship. At the time the wing boats are getting a bearing, the center boat is doing the same thing. Then with the three-arm plotting board, using the center arm on the board as the center ship, and the wing arms on the board as the wing ships, and having the wing arms on the board set the same distance from the center arm as the wing boats are from the center boat. It is possible, then, to locate the exact position of the submarine from the intersection of the three bearings. The plotting board is so arraigned that the relative bearings transmitted by the listeners of the wing boats to the commanding officer are immediately converted into magnetic bearings, and are then transmitted over the wireless 'phone to the flagship as magnetic bearings. When the commanding officer of the flagship has then determined the exact position of the submarine on the plotting board he can tell the course, the distance of the submarine, and if the chase lasts for some time, the speed of the sub as well. He then gives the orders over the 'phone for all boats to take up their tubes and proceed, at a given speed, to the place where the submarine was when they got their first

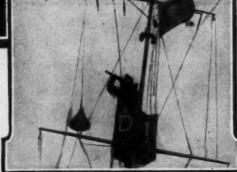
(Continued on page 136)



Firing the 3-inch gun on the forward deck. Note the position of gunners and that another shell is ready

time necessary to put it over the side and take it in. So in order to overcome this fault, the S. C.'s have a "MB" tube which is for exactly the same purpose but only good up to seven miles, and an "SC" tube which is only good for about three miles. The difference between the "SC" and "MB" tubes being that the "SC" tube is much more dependable and there was less chance of error than there was with the "MB" tube. These tubes extended right down through the hull of the S. C. boats and could be lowered or raised in a couple of seconds.

Then the chasers had a trailing device which was lowered over the stern, which was for the purpose of finding the submarine they were chasing; after it had stopped running and lay quietly on the



The crow's-nest where someone is always on watch

Noma Gets an S.O.S.

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An Interesting Account of Some of the Service Performed by One of Our. Fleet of War Yachts

By Ensign H. Lovell Carr, U. S. N. R. F. On Board Noma, Yacht Owned by Vincent Astor

T was in the early part of August 1917, only a short time after the converted yachts had arrived at Brest, and had immediately taken up their share of the patrol and convoy duty, that Noma, formerly a well-known New York yacht, was homeward bound after convoying some supply ships for 500 miles toward the States, received repeated Allo, Allo, Allo messages from an English merchant-man. This call, the meaning of which is "I am attacked, send help," was received about 10:00 A.M., and Noma was about 250 miles



Noma, the yacht owned by Vin-cent Astor at anchor in the Laire River at St. Nasaire



The gun crew of one of the forward 3-inch guns on Noma

from land. The position of the ship in distress was fifty or sixty miles away

Noma headed to the designated position at her best speed, while the calls from the merchant-man were becoming desperately frequent.

Shortly after two o'clock in the afternoon the lookout in the forward crow's-nest reported smoke dead ahead. Immediately this was followed by the report of two bright flashes, apparently gunfire.

As we neared the smoke we could see through our glasses a ship with her stern on fire and two life boats being lowered Her union jack on the red field was made out, still

flying defiantly amidst the smoke and flames. Noma was approaching from the starboard quarter of the unfortunate vessel. Suddenly she ran up the British Naval Ensign and her semaphore machine signalled to our bridge "submarine on our port side." In the meantime the men who were abandoning the ship climbed up over the side and let their life boats drift away

Sure enough as Noma passed astern of the other vessel

the lookout spotted the periscope only about 100 yards ahead of our ship. It was out ahead of our ship. of water about fifteen inches, painted a light color, a little thicker than a broomstick, and moving rapidly across our bow.

The captain maneuvered so as to ram the "sub" and in doing so passed directly over it, but the Hun had submerged too far down for any damage to be done. A couple of depth charges were dropped, but at this stage of the game their present state of efficiency had not been reached, and both not been reached, and failed to explode. Nothing can convince the crew that

both of the "tin cans" did not hit and roll off the deck of the submarine. Of course, everyone was at his station for general quarters long before this, but now was the first time to learn what had happened.

Our friend across the way was pretty badly battered. We could see a 4-inch gun on its side, and counted about a dozen places where hits had been made by shells, also there was

a list to port.

In the distance coming over the horizon two English destroyers were racing to the scene. Medical aid was asked, and the doctor from Noma was sent over in a lifeboat. It was on this occasion that the story of the fight became known. The ship was H.M.S. Dunraven and had sailed from Plymouth. She was one of the famous "mystery ships" that had been very successful in decoying submarines to their destruction, and was in command of a reputable naval hero, who wore the Victoria Cross in honor of his past successes against the Huns.
Upon the question "why are you sailors in civilian



Several destroyers arrived shortly after we did and was an indication of the efficiency of the Allied navy

clothes?" the answer was, "If any of them had been taken prisoners and had been wearing their Navy uniform, the Germans would have shot them, because they sailed on a ship with a concealed gun."

The Englishman's story ran as follows: About nine o'clock in the morning a submarine was sighted at a distance of about 9,000 yards and fired one shot that passed over Dun-Then it submerged and was not seen for some time. Its next appearance was only 4,000 yards away, and Dunraven opened fire with its 1-pounders, in hopes of drawing the enemy nearer, so that they could suddenly bring their big gun into action at short range.

replied and its first shot hit the after magazine. exploding it and turning the concealed 4-inch gun upside down. It was now a case of the trapper trapped. Needless to say that Dunraven put up the best fight it could, but I-pounders do not make much of a fight against a 4-inch gun as they believed the German had on his deck.

The Hun then gave Dunraven a sys tematic shelling and hoped to sink her in that manner, but did not know that her holds were jammed full of lumber to add bouyancy for just such an occasion. However, to make things certain, the German commander closed into 300 yards, and then sent a torpedo crashing into the port bow. The explosion made a hole approximately

tow Dunraven toward Plymouth. A little later we were joined by a French light cruiser and the Kanawha, another converted New York yacht.

A sight like this could not help but demonstrate that the Allies held the sea in a vice-like grip, when five ships answer a call for help in so few hours, the three flags, English, French, and American, all working together for the same

For the remainder of the day and all through the night the convoying ships made circles around the two to prevent further attacks. As dawn approached and the sun came

up, we could plainly see that Dunraven was slowly but surely on her y to Davy Jones' locker, wav Her quar-



As we neared we could see that her stern was on fire

ter deck was awash, and it seemed as though every next wave would take her down, but still she fought on. in the day, she lost her fight, but the crew had ample time to get aboard their destroyer and head for home. While Noma headed for Brest with the wounded boys that they had received the previous day.

These wounded men were another example of the silent

sacrifice that John Bull was making to hold the sea, and makes more evident the debt of gratitude we owe to him. The episode closed when the wounded sailors were taken

to the American hospital, where all but one recovered. Perhaps at this time some of the mystery of the "Mystery

Ships" can be cleared up.

The idea originated with the British as soon as the Germans opened their unrestricted warfare upon all merchantmen, and in doing so horrified the world by their hideous crimes, such as leaving the survivors ship wrecked miles from land, or firing upon the occupants of life boats with machine guns.

The Admiralty took over some cargo ships and refitted them according to

their plans.

These ships had their holds filled with buoyant materials, so if torpedoed would stay afloat. Large calibre guns were placed aboard with collapsible screens around them, and upon putting to sea had all appearances of being loaded down with supplies.

B who cit to ci al in to ce e willing

On several occasions these ships were captured by U-boats, and all hands except the gun crew would abandon ship. The Germans would then come along side to place bombs aboard,

when their plans would be upset by the loud report of the concealed gun.

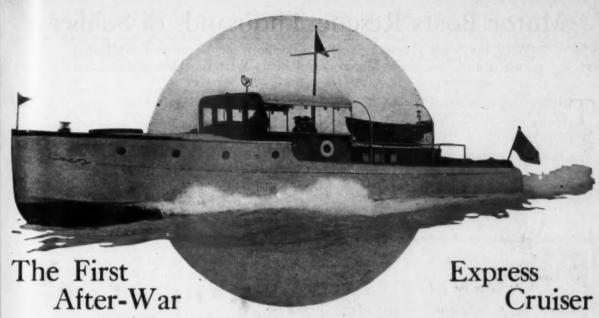


Captain of Noma in the war zone, Lt. Com-mander L. R. "Bill" Leahy

30 feet long and 15 feet high. But even then the Lumey refused to sink. However one of their officers made the remark "we were damned glad to see the Yank coming, for we knew then that we would get out all right."

By this time the two English destroyers were standing

by, one had already passed a line and had commenced to



These photographs have just been taken of a new boat—a real 1919 model—the last word in standardized express cruisers. They illustrate splendidly the degree of refinement characteristic of this boat.

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The designer and builder of the boat is the Great Lakes

gives the engine a chance to breath and to operate efficiently.

All controls are brought to a central station in the middle—not at the side—of the bridge deck. Here the owner has his steering wheel, engine controls, binnacle, charts, etc., all instantly at hand and easy to reach and to use. Immediately ahead of the steering and control column is a windshield extending the full width of the boat—a windshield splen-

engineer and a toilet. It is finished in white throughout, is splendidly ventilated and lighted. A real engine-room which

didly built, which is instantly adjustable.

The forward stateroom is a marvel of compactness. Four people can comfortably sleep in it. Ten people can comfortably dine in it. Its big, deep spring pullman berths are beautifully upholstered in velour, its portholes daintily covered with silk hangings, its floor carpeted with a Wilton carpet. Big locker space, ample ventilation and light provided by an overhead skylight and portholes. A private lavatory is provided in a room adjoining this stateroom. A built-in Victrola is also located in this cabin.

The galley, a highly important feature of any



Boat Bldg. Corp., of Milwaukee, Wis., and they have produced in this new craft absolutely the finest thing in boat design and construction. Every available inch of space in the interior of the boat is put to advantage. Every modern convenience has been employed, as running water, screens, electric lights, etc.

The engine-room has full headroom for as much of its length as is necessary. It has a bunk for the cruiser, is a work of art. Equipped with a three-burner alcohol stove, a great big ice-box and more than enough cupboard space and dish lockers, this galley forms one of the most remarkable features.

The power plant is optional with the owner as to make only—the option being necessarily confined to either an eighty-cylinder Van Blerck or Sterling. A maximum speed of 20 m.p.h. is obtainable.

Motor Boats Rescue Thousands of Soldiers

When the Army Transport Northern Pacific Went Ashore on Long Island Submarine Chasers and Motor Patrol Boats Were the First to Give Aid

By Harwood Koppel

HE work done by the motor-driven submarine chasers or S. C. boats as they are officially designated in Army transport Northern Pacific on January 3 and 4, as that vessel lay on a sand bar off Fire Island, has added another page of imperishable glory to the part played by motor boats in the Great War. In seas that tossed them about as though they were chips these boats worked un-ceasingly until all of the troops had been removed. The crippled and helpless were their special forte, for it was next to impossible to place men in precarious condition in the perilous small boats and it was only because the Subthe larger destroyers and other craft standing by, but some men were landed ashore by the patrol on Friday the third. The number of the chasers fast alongside of the transport varied with circumstances, but it was hardly ever less than two, sometimes three and occasionally four.

It was tantalizing work that unloading of wounded men from the high decks of the Northern Pacific to the little chasers. A dangling ladder and a wobbling deck offered many an opportunity for seaman acrobatics, and the "gobs" aboard the patrols could say with no figure of speech that they held on with their toes and had their hands full at the same time. The well and the wounded had both to be steadied

as they came down the ladders from the transport, and after the doughboys had been put on the decks of the slim, lithe looking chasers, the crews had to stand by to see that the landsmen did not lose their balance and topple over the

After two unsuccessful attempts chaser No. 293 managed to make fast to the side of the Northern Pacific on the morning of Friday, the third, the first day that it was decided by the Naval authorities that the chasers should be used in this work. Lieutenant Le Sauvage, in charge of the work, nearly had several "warships" wrecked against the side of the transport. But skillful helmsmans and cool com-

manders brought them along-

s i de



Crews of the 110-footers based at Brooklyn which responded to the stranded ship's call for assistance

marine Chasers literally ploughed their way through the swirling, curling, beat-ing, ever-beating white-capped billows and with showers of spray falling on their bridges like veritable Niagaras and heavy seas washing their decks they would finally come to in the lee of the big liner and take on their precious human cargoes.

To the spectators who stood on the not distant beach and watched in breathless suspense the work of the 110-footers, the seamanship of their comman-ders and the sturdiness of the little craft themselves was an unending topic of com-

Those men are winning Distinguished Service Crosses over and over again," was a reiterated

remark on the sands. Oft times as the little boats would careen in a list that appeared to be merely the start of a "loop-the-loop" would end their careers, the spectators on shore would gasp and the women would hold their hands momentarily over their eyes. But they would right themselves and dash man-fully straight through a comber that would hide even their mainmasts or aerials. Naturally they shivered and quivered as the big breakers buried them, but like a dog they would

shake the water from their decks and go barking onward. The anti-submarine patrols worked in conjunction with the Coast Guards and they both worked in relays. The chasers did mostly ferrying work, carrying the soldiers to



Chasers 293. 292 and 294 did heroic work in taking off wounded soldiers

without damage. Ensign Middleton commanded 293. In order to reach the Northern Pacific, Lieutenant Geo. R. Le Sauvage had to take his craft through a channel of about twelve feet, maneuver around the three anchor chains of the transport and practically scrape one of them before he could bring S. C. 293 under the lee of the troopship. Cheering soldiers lining the vessel's decks urged him on and the sub chasers 291, 292, and 294 were closing in behind him. S. C. 293 made fast first, however, and lay off just far enough to prevent the seas smashing the craft against the side of the liner. In the meantime the crew of the big ship had been busy and twenty-four ladders had been lowered along her lee side. As the chasers made fast the soldiers came swarming down the swaying ladders and were quickly helped on board by the sailormen. When the 293 had taken eighty-six men aboard she backed away stern first. The instant she got aft of the liner a big sea struck her forward, came down her decks and disappeared over the stern without breaking. These men were taken into New York by S. C. 293 and landed at the Battery late in the afternoon and were sent from there to Debarkation Hospital No. 3, the former Greenhut-Siegel-Cooper building at Eighteenth St. and Sixth Ave.

In the meantime the other three chasers, now supplemented by all of those who could find berthing space alongside of the transport were busily engaged ferrying the wounded men to the hospital ship Solace and the various cruisers and destroyers standing off. At noon the low tide interrupted for a short period the work of the Patrols, but soon it was under way again and continued all Friday afternoon and most of Saturday until the last seven men

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were removed, Saturday afternoon at 3 o'clock.

Each of the submarine chasers would receive a cargo of seventy-five or so human beings, back carefully away from the Northern Pacific and then speed away to complete the transfer. Those men who were in a serious condition and were handed aboard the chasers strapped tight in the wire basket litters of the Navy were carried into the cabin amidships where blankets and hot drinks were awaiting them.

While the work of rescue was going on a cold, miserable rain that penetrated through the pea jackets of the sailors forced its way through their blouses and finally wormed past their underwear and chilled them to the marrow was falling, falling, falling. At times it formed a mist that all but obscured the liner from the shore and often it was thick enough to hide one chaser from another. It added much to the difficulties of the situation and caused more discomfort than the biting north to northeast wind that was blowing with more or less intensity on this day. Saturday the weather, while colder, was better, as the sun was out and the rain had entirely stopped.

The eighty-six doughboys crowded on the decks of Submarine Chaser No. 293 were continually drenched by the

huddled in bunches about the decks. Attempts to secure shelter from the rain and cutting wind were all in vain, but in their misery the men began to sing, and as their voices rose a cadence that could be heard above the pulsing throb, throb, throb of the engine they beat time with their feet up on the deck and the refrain that was wafted o'r the waves was:



Destroyers, Aeroplanes, as well as sub chasers were soon alongside

Ashes to ashes!
Dust to dust!
If the Boche don't
get us
The Navy must!

As the litter cases, strapped in their wire baskets, were carefully handed down to the decks of the Chasers, the crews of the little craft would tenderly carry them into the cabin amidships, but those who were also on litters and not so badly injured or so ill as the

others would be placed outside. Two of the litters would be placed on the Patrol's tiny bridge, where the canvas sheltered the wounded soldiers from the showers of spray, while four more would be shifted to the forward decks and protected with an improvised screen. In this way the wounded were all taken to safety.



In war times the 110's were ready for other kinds of business

seas as the little craft first wallowed in the trough and then rose high on the very crest of some huge wave, which eventually broke over it forward or abaft the beam. If the seas were calm for an instant the speeding S. C. would plunge through the waters, sending showers of spray over the shivering soldiers who with chattering teeth stood

Delaware Yachtsmen
Respond with
Sixty Motor Yachts

Hundreds of Men Trained in Long Distance Off-Shore Motor Boat Racing Man the Naval Ships

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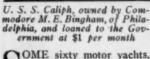
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Some sixty motor yachts, whose home ports are on the Delaware and adjacent waters, and which were given over to the Government for service during the war, have been returned to their owners. Some have been returned in fairly good shape, while complaint is made that others are pretty well used up. Consequently there is considerable discussion as to reparation for damage, all of which will most likely be properly adjusted. Doubtless some sacrifice has been made by the owners of these boats, and will yet have to be made. Surely much sacrifice was made inasmuch as these owners had deprived

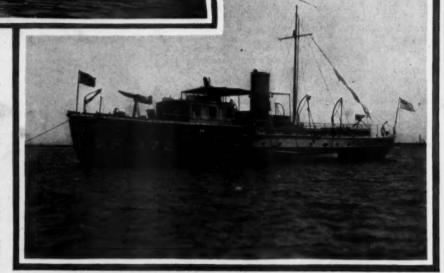
themselves of the use of their boats during the war period so that now the question arises, "Was it worth while?"

First off, the magnanimity of the yachtsmen on the Dela-

First off, the magnanimity of the yachtsmen on the Delaware in coming to the aid of the Government in proffering their personal services, as well as their boats was marked. While the Government accepted only about sixty craft for use in the service, it could have had six times that number. When the call came, and even before the call came, the yachting fraternity along the Delaware offered its entire fleet of pleasure craft, from the most palatial yacht down to the humblest dory.

In this, yachtsmen along those waters hold a distinction of which they may be justly proud, and which will furnish a bright page in the history of the war, and to which the children and grandchildren in years to come may turn with pride. From the Delaware River came the very first private

yacht to go into the service . · Arawan II, the flagship of Corinthian the Yacht Club, owned and commanded Commodore Charles Longstreth, who was Lieutenant - Commander, and who during this time was in charge of the patrol of the Delaware from Philadelphia Reedy Island. Philadelphia, as well holds the distinction of being able



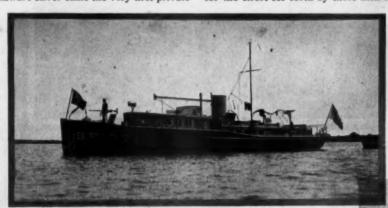
U. S. S. Drusilla, owned by Ensign A. J. Drexel Paul, of Philadelphia. Her length is 84 feet and her power two heavy-duty 20th Century motors

to furnish some of the ablest navigators to man these boats, many of which were commissioned officers, many doing overseas duty in the handling of the now famous 110-footers, and a considerable number of them doing bridge duty on transports and cargo carriers recently built and put into the service by the Emergency Fleet Corporation, and furthermore, not a few of them going into permanent service in what now promises to be America's rehabilitated merchant marine.

As in the accomplishment of all great things, the yachtsmen of the Delaware were not without their abuse in the way of criticism. Their anxiety to help win the war by employing their talents acquired in play and recreation and sport in times of peace was even scoffed at. But a sane analysis of the services performed and the results achieved compensates for the effort set forth by these men in this direction. As-

suming that yachting is a sport, then yachting stands a long ways in the foreground as a sport that is of infinite value in times, or in a crisis like that just passed.

In contrasting yachting as a sport with service in coast defense it is a problem as to just what lengths one may go. In a recent article bearing on the subject (Continued on page 86)



U. S. S. Absegami, owned by Allen K. White, of Atlantic City, N. J. She was commanded by Lieut. Morse

Graphic Navigation

An Illustrated and Diagramatic Description of Methods by Which the Position of a Ship at Sea May Be Determined without the Use of Higher Mathematics

By Capt. A. C. Knight

I-LATITUDE BY MERIDIAN ALTITUDE OF THE SUN

HE object of this work is to facilitate understanding the methods of finding the "position of ship.'

As far as possible, drawings have been prepared showing every step in the solution of a problem. They have been arranged in regular order

and their meanings clearly indicated. The mathematical operation is evident not only on the face of each but the relation of new steps to those already accomplished can be appreciated.

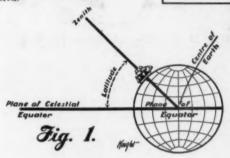
This is the first instalment of what promises to be the best and most instructive series on Navigation ever published. The subject will be handled from an entirely different viewpoint than has ever before been attempted. Instead of masses and masses of definitions and rules which are next to impossible for the amateur to understand or remember, each step in this series will be illustrated by means of simple diagrams so that the reader can readily grasp each point. On the other hand, the amount of text will be reduced to a minimum. Capt. Knight, the author, is the originator of the methods he will describe and he used them most successfully in his instruction work in the Power Squadron Navigation Schools during the war.—Editor.

on opposite sides of the Equator, subtract the Declination from the Zenith distance to get latitude.

The problems with each article of this series should be worked through, using these pages as a guide. A copy of Bowditch, a Nautical Almanac for 1918, pencil, and paper are requisite.

For the purpose of simplicity and brevity all reference to longitude will be omitted at this time, because the point will be fully covered in

another article.



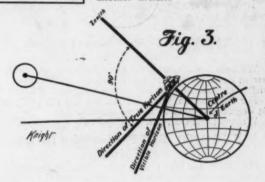
Celestial Equator, Zenith, and Latitude

Fig. 1. The plane of the Equator projected out into space becomes the plane of the Celestial Equator.

A line from the center of the earth to our location pro-

jected out into space extends to the Zenith.

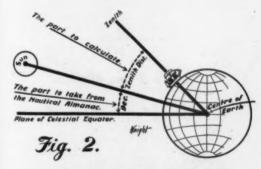
Latitude equals the shortest distance between this line to the Zenith and the plane of the Celestial Equator, measured in degrees, minutes and seconds of arc.



Problems for practice will follow each lesson in the succeeding issue of this magazine.

The Horizon and Dip

Fig. 3. We cannot observe (measure) from the Zenith because we cannot locate it directly. We therefore observe from the visible Horizon. The true Horizon will be above this by the amount of the Dip, and the Zenith is exactly 90 degrees above the true Horizon, or at a point overhead the



Declination and Zenith Distance

Fig. 2. A part of this distance called "Declination" is found in the Nautical Almanac. The other part we calculate and the algebraic sum of the two parts equals the lati-

The above stated in detail is as follows:

Case I, as in Fig. 2. When the sun is between us and the Equator, add Zenith distance and Declination together to get latitude.

Case 2, as in Fig. 11a. When we are between the Sun and the Equator, subtract the Zenith distance from the Declination to get latitude.

Case 3, as in Fig. 11b. When the Sun and ourselves are

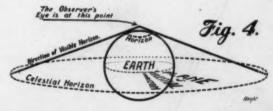
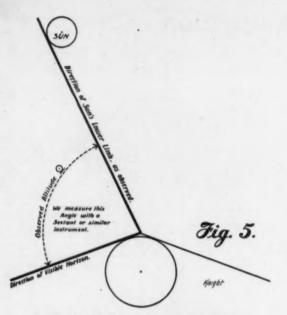


Fig. 4. Supposing ourselves to be at a little height, say 50 feet, above the surface of the water, we could look down around us to the Horizon, which is the well-known place where the Earth and Sky seem to meet. With this preliminary let us take an example.

Latitude by the meridian altitude of the sun method must be obtained at exactly noon, which is the instant the sun is This moment may be determined by taking at the Zenith. This moment may be determined by taking a series of sights of the sun with the sextant. When these observed altitudes begin to decrease, the sun has just passed the Zenith. Of course it will then be necessary to allow for declination according to your position, which will be explained later.



FIRST STEP-Observed Altitude

(See Fig. 5)

With our sextant, a perfect instrument, and at exactly apparent noon, we observe (measure) the angle between the visible Horizon and the lower limb (edge) of the Sun.

For instance, on July 15, 1918, we find the angle to be 84 degrees, 30 minutes, and no seconds.

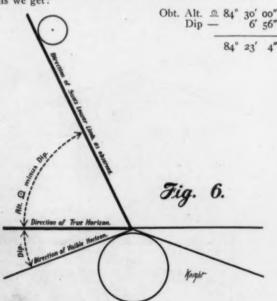
Written thus: Obs. Alt. 284° 30′ 00″

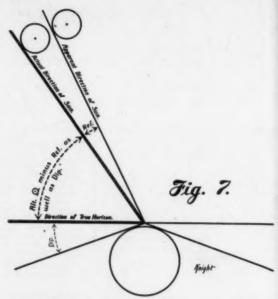
SECOND STEP—Correction for Dip

(See Fig. 6)

Correction for Dip, which always consists in subtracting the angular distance between the visible and the true Horizon from the observed altitude. The true Horizon is in the direction of a line projected straight out from the eyes and at right angles to the radius of the earth at the position of the observer.

This correction is found in tables, for instance Bowditch, Table 14, in the column marked "Height of Eye" we must find our height above the water (50 feet) and opposite in column marked "Dip of the Horizon" we take out the amount to be subtracted—6 minutes and 56 seconds. Doing this we get:





THIRD STEP-Correction for Refraction

(See Fig. 7)

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As the Sun is not where we see it, unless it is at the Zenith, but always lower down, this is always a subtractive amount and can be found in tables, see Bowditch, Table 20A. Opposite our 84 degrees in the column of apparent altitudes, take out 6.1 seconds from the column of mean

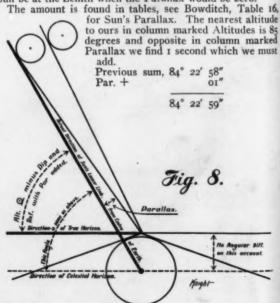
Calling it 6 seconds and subtracting we get

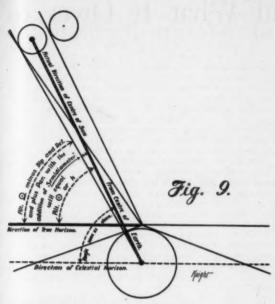
Previous sum, 84° 23′ 04″ Ref. — 06″ 84° 22′ 58″

FOURTH STEP-Correction for Parallax (See Fig. 8)

Parallax is the angular difference which added to altitude makes the observation what it would be if taken at the center of the Earth, or the angle at the heavenly body subtended by the radius of the Earth.

This correction is always an added quantity unless the Sun be at the Zenith when the Parallax would be zero.





FIFTH STEP-Correction for Semi-Diameter

(See Fig. 9)

Semi-diameter is the angle at the center of the Earth subtended by the radius of the Sun and gives us our angle corrected to the center of that body.

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This correction is additive when the lower limb has been observed and subtractive when the upper limb has been observed.

Semi-diameter is found in the Nautical Almanac in tabular form and is given for the month and approximate day.

lar form and is given for the month and approximate day.

We find in the Almanac, therefore, that on July 15, 1918,
the semi-diameter of the Sun was 15.76 minutes or 15 minutes and 46 seconds which, added to the preceding sum,
gives the corrected altitude of the Sun, or (h \(\triangle \)) thus,

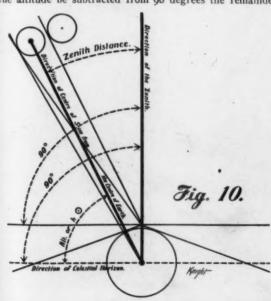
Previous sum, 84° 22′ 59"

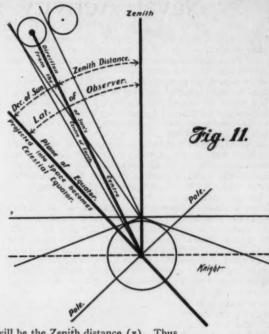
S. D. + 15′ 46"

SIXTH STEP-Finding Zenith Distance

(See Fig. 10)

The Zenith is 90 degrees above the true Horizon. If the true altitude be subtracted from 90 degrees the remainder





will be the Zenith distance (z). Thus, 90° 00′ 00″ h, © 84° 38′ 45″

STEP—Combine Zenith Distance SEVENTH and Declination

(In this case add the two together.)

(See Fig. 11)

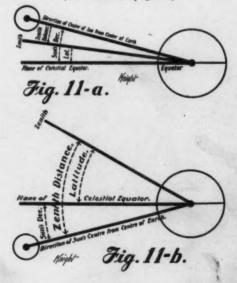
Declination of the Sun is found in tables in the Nautical

For July 15, 1918, the declination at noon was plus 21 degrees 37.4 minutes. Plus, meaning that the Sun was north of the Equator. Four-tenths of a minute equals 24 seconds. In our problem,

Lat. 26° 58' 39"—N. Ans.

If a minus sign had been found with the declination it would have indicated that the Sun was south of the Equator. It would then have been necessary to subtract the declina-tion from the Zenith distance.

(Continued on page 62)



Naval Activity and What It Owes to

By Lieut. John

THE Section Base at New Haven was organized and has been carried on chiefly by a group of officers who had been both yachtsmen and naval militiamen; and this combination proved good.

A man who is a yachtsmen only, usually fails to appreciate the importance of military discipline; while a man who is a naval militiaman but not a yachtsman, may be an excellent officer on board a big ship but he is usually not a success on board small vessels such as are used in the Naval Districts for coast defense.

Naval preparation for the impending war was commenced at New Haven in January, 1917, by a series of lectures given by Commander Charles F. Chapman and others under the auspices of the Power Squadron of New Haven, which I then commanded. Yachtsmen generally were invited to these lectures and many instructors and students of Yale University became interested. This was one of the factors leading to the formation of the Yale Naval Training Unit.

leading to the formation of the Yale Naval Training Unit.

Until March none of us had heard of the plan for establishing Section Bases. We all expected service afloat and prepared for it. On March 5, 1917, I visited the Third Naval District Headquarters at the Navy Yard, New York, and before I got away was enrolled as a lieutenant, assigned to duty as "temporary Base Commander at New Haven" and

instructed to take the necessary steps leading to the enrolment and training of personnel, and the enrolment of suitable boats; also to locate suitable quarters, wharf, etc. The University generously provided tem-porary enrolling officers and lecture rooms. University professors and my former Naval Militia associates (I being a retired officer of the Naval Militia) and associated in the Power Squadron pitched into the instruction work which was carried on both in New Haven and at Hartford before the men were called The mato active duty.

The old New Haven Yacht Club Station (shown in one of the illustrations) was chosen as the Section Base Head-quarters; from this, the patrol operations were to be carried on, it being conveniently located upon a deep and protected anchorage basin and within easy reach of all supply dealers and existing repair shops. The Yale boat-house was chosen as the barracks for men under training. Enthusiasm abounded both among the men entering the service and

jority of these instructors were later enrolled as officers,

as the barracks for men under training. Enthusiasm abounded both among the men entering the service and among the New Haven people, who provided buildings, wharf, and funds so that operations could commence without waiting for Government approval of appropriations. By May over 300 of the men enrolled here were on duty under training, and during the summer some 500 had been trained and assigned to more than sixty different vessels, from small yachts to the big converted German liners.

The Cornfield Net was established and the patrol of it was based here. This meant duty for a body of artificers, as the fleet of twenty to thirty converted yachts hurriedly commissioned and sent here was performing far more arduous duty than their designers had ever contemplated. Machine, carpenter, and pipe shops were established, storehouses requisitioned and built and equipment and supplies obtained.

For the instruction work, all the Naval Militia equipment in the State, including Navy steamers, motor boats, pulling cutters, and ordnance was obtained from the State authorities and this was most fortunate because no such material was obtainable from regular sources until long afterwards.

The staff for administrative purposes and for instruction were nearly all local men and had been formerly associated in the Naval Militia or in the Yacht Club or Power Squadron and all worked together with the harmony

Инс



S. P. 2009, formerly known as Laura Reed and owned by Henry L. Galpin, of New Haven, Conn., was used part of the time by the Yale Naval Training Unit



A view of Section Base No. 1, the headquarters of the Naval Reserve Force at New Haven, Com.

Yachtsmen and Yachting at New Haven

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which is promoted alone by mutual understanding. So much for the general activities and now for what I know of the achievements of local yachtsmen in the Naval service.

The list of yachtsmen is as follows, it is given alpha-

betically:

Mather A. Abbott, Lieutenant, U. S. N. R. F. This officer's duty has been entirely in connection with the Yale Naval Training Unit, of which he was second in command until its recent demobilization. He is also commanding officer of the 100-foot converted yacht Itasca, used for training purposes. It was largely due to his enthusiasm and hard work that the Naval Unit at Yale has been such a success. He has been a yachtsman all his life.

George D. Atwood, Lieutenant J. G., U. S. N. R. F., New Haven Yacht Club, commanding Submarine Chaser No. 177. This officer enrolled at New Haven as an ensign before the commencement of the war and was nominated by me to command the U. S. S. Rutoma, an 80-foot New Haven yacht. It is interesting to note that the crew of eight men, also nominated at the same time, and largely Yale undergraduates, had within a year all become commissioned officers. Ensign Atwood made such a good record in putting

the Rutoma in commission that he was selected to be sent to the first reserve officers' class at the Naval Academy in June, 1917. Upon graduation he was as-1017. signed to command S. C. 177, navigated her from Port Clinton, O., to New York via the canal, made ready for service in foreign waters at New York and at New London. He sailed for England, touching at the Azores, in command of a group of these vessels, and after a very exhausting winter voyage across the western ocean has since served from a base on the British coast. Lieut. Atwood's only preparation for

Naval service was in sailing small boats and yachts in and around Long Island Sound and his performance of his duties shows that this is not a bad preparatory course for Naval service. He was promoted from ensign to lieutenant J. G. after about a year's service.

Robert G. Baird, Lieutenant J. G., New Haven Yacht

Robert G. Baird, Lieutenant J. G., New Haven Yacht Club. This officer entered the Naval service via the Naval Militia. He has served on large vessels exclusively and is now attached to the U. S. S. Mt. Vernon. He was, when he entered, the service fleet-captain of the New Haven Yacht Club. His preparation for Naval service was on sailing yachts. He owns the schooner Elizabeth. Mt. Vernon was torpedoed last fall and narrowly escaped destruction.

Seymour M. Bradley, Lieutenant J. G., City Point Yacht Club, U. S. Power Squadrons. This officer has been engaged in training men since the commencement of the war. He enrolled at New Haven as an ensign, served at Section Base I, New Haven, as an instructor until October, 1917, was then transferred to Pelham Naval Training Camp where he has since been engaged in instruction work and administrative duties. He had had military training in the field artillery and commenced his Naval training as a mem-

ber of the U. S. Power Squadron, New Haven Squadron, of which he was second in command when he enrolled in the Naval service. He owns the 35-foot yacht Diana. He is an experienced boatman but has had no opportunity to serve afloat.

R. L. Bishop, Ensign, U. S. N. R. F.

Traver Briscoe, Lieutenant J. G., U. S. N. T., New Haven Yacht Club, U. S. Power Squadron. Enrolled at New Haven as boatswain's mate, first class, served at Section Base II, Bridgeport, for a few months, was recommended (Continued on page 90)



U. S. S. Abalone, first commanded by Ensign C. V. Schlact, son of the owner. This was a very reliable boat and was based at New Haven from April, 1917, to November, 1918



Much of the property was donated by citizens of New Haven and alumni of Yale University

Great Lakes Yachtsmen Respond Nobly

Hundreds of Motor Boatmen Join the Naval Reserve Force After a Course of Instruction Given by Detroiters

By William Reed-Hill

OW the yachtsmen of this country contributed their share to the efforts that brought a final victory makes an interesting story. The men of the coast yachts played a great part in places where possibility of danger added interest to their work.

It should not be forgotten, however, that the yachtsmen of the Great Lakes Districts enlisted, gave up their boats

and worked hard to add to their list of sea-men and officers in Uncle Sam's Naval or other service. While many are now in line for release there are more than a few who have grown to like the service, and some whose call never came who still are eager

to serve afloat.

Among the first to receive urgent calls were the men of the Detroit Unit of the United States Power Squadrons which had, already studying, a number of men who had gone far enough to be ready for a first class pilot's examination. These men at the first sign of coming trouble dropped everything and gave their whole attention to the study of navigation and allied subjects. The Detroit Power Squadrons, at the end, had started sixty-three men on their way to naval rank. When the last three left for the officers' school at Chicago it was almost a certainty that the armistice would be signed.

Among the first to leave were Hayward Murphy, Clarence Cull, Grover Farnsworth, former D. B. C. Y. Coxswain Charles Belanger, Tom Owen, Dick Gehlert, E. Y. Dow, Hoffman, Emerson, and a whole crew of the pick of the men of the various clubs of this district. These men started as ensigns or lieutenants. Several like Belanger or Owen were diverted at the last minute to take officer's rank in the Ordnance or Signal Corps of the Army. Farnsworth became an assistant naval constructor. Belanger has been chasing all over the western end of Europe and once or twice during the chase nearly bumped into one of

those long range shells with which the Hun was playing. While all this was going on others of our men, like Dick Gehlert, were making their reputation as experts with the Liberty Motor, or, like Dow, were helping to rush out air-planes. Weber, P. L. Emerson, Jules Hoffman, Aaron Dennis, and Ralph Trix found themselves ensigns in charge of S. P. details on the Detroit and St. Clair Rivers.

R. S. Gehlert, Leo Dederich, John Owen, Arthur Born, Hugo Ulbrich and a whole lot more were busy helping the late comers to get started. They deserve credit for their hard and untiring work at home, the more because they were each ready to go at call.

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C. G. Davis was made a lieutenant as was also Mark Sibley. They were set to work gathering boats and inspecting and equiping them, making them over into S. P.s. Davis had just finished helping to get some 500 M. L.s over to the British, superintending the work at Halifax for a time. Sibley is understood to have been sent overseas to Admiral Sims' fleet shortly after. Hayward Murphy drew executive officer's job on an ill-fated S. C. which burned up quite discon-certingly. His skill saved crew, sick passengers, and some Government property.

Then there were men like Smith B. Tay-

lor, of Chicago. He studied with extraordinary faithfulness, won command of an S. P., an ensign's rank, and a beautiful girl. This reads queerly, but we will let it stand though

I would like to bet the girl commands him! For a time it looked as though some of our older men might get a chance at the Hun afloat. These men had been made navigation inspectors. There was one time when they were ready to go East as lieutenants, g., for duty on shore stations; but the Hun had enough and they continued their local work undisturbed.

Some people in the East fail to realize the length of our coast line on the Great (Continued on page 80)



William Reed-Hill of Detroit, the man who enrolled many Yachtsmen in the N. R. F.



S. P. 960, erstwhile Terrier, hailing a big lake freighter in the St. Claire River. This patrol boat is one of the Great Lakes standard cruisers and has given an excellent account of herself

Lessons Learned from the War

How it Was Proven Time and Time Again That the Former Pleasure Motor Boat Could Be Depended Upon to Go Out to Sea in Any Kind of Weather and Perform Real Naval Service

By George Story Hudson

AMONG lessons we have learned from the war is that the average motor boat, altered to make living aboard in comparative comfort practical, is suitable for a naval special patrol or dispatch work when a nation is hard pressed. Moreover, we have discovered that a motor boat, in skilled hands, may keep the sea in most weather and that the marine motor when given a ghost of a chance is to be depended on for a rough and tumble with temperature as low as minus 20.

The First Naval District had such boats when the war opened thanks to individuals who responded promptly to Uncle Sam's urge. These craft met the emergency till vessels could be turned out to Government specifications, yet most of the old boats were retained after that. It is worth while noting, in this connection, that ordinary pleasure craft without much of a pedigree to brag about have performed so admirably summer and winter that they have been purchased outright by the Navy Department.

When the call for boats was sounded Boston responded in such large measure that the available fleet was of con-

siderable proportions. As quickly as possible the boats were placed in service in the Boston Section, or scattered overnight, as it were, to bases as far down the coast as Eastport, and the patrol was on. The Boston Power Squadron was drawn upon for men and material, everything volunteered, and in an amazingly short space of time the S. P.'s were leaving no part of the shore line unguarded, relying on the element of speed rather than armament for the very good reason that guns were not mounted at first and the boats must relay a warning should the enemy put in an appearance. It was well enough in summer, this

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It was well enough in summer, this patrol, except for its monotony. There came rough weather, naturally, with the drizzly northeasters, the smoky southwesters and the quiet, ordinary looking men standing watch and watch through black night rains while waiting for something to turn up. Thus, as winter approached

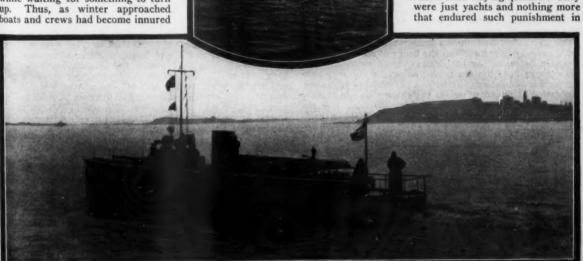
to the heavy winds and the seas they brought and were apt in the lesson of avoiding currents that set on shoals lurking in the infinite loneliness off the reef-strewn coast.

Submarines appeared near the entrance to Boston Harbor, but the patrol then was too keen for the raiders to penetrate for a shot at the city or torpedo for cargo-carriers that went about their business in safety when the convoy system had become an established fact. These erstwhile yachts, popularly regarded fit only for summer weather, were making long passages in wide water that the boys in France might be fed and clothed. A 40-footer that, before the war, cruised between Boston and Marblehead, for example, and never ventured from moorings unless conditions smiled on the adventure, now plunged into roaring seas on receipt of orders. No delay for pleasant skies, but go at once and get there.

Boats with jack-knife bows and skins less than one-half inch thick were included in this patrol of the so-called motor boats. Some of them leaked through decks, and the windows in the trunk houses squirted and wept with

each broadside slap. Yet they put to sea with never a look at the weather, these chaps who, a short time before, were landsmen and home-loving at that. The motors had to respond to the throttle in those exciting days, and it may now be acknowledged that breakdowns were infrequent. They carried a bucket full of spare parts for the twins, as almost every boat detailed for outside work swung two wheels. If one motor balked, the other would do the pushing till repairs could be made. Then, everything wide open, they smashed through seas toward the goal, frequently driving under instead of over, spray coming aft in sheets, drenching the resolute fellows; and they never flinched.

Such was the work cut out for boats seldom larger than 60 feet overall and designed for speed rather than staying qualities. They were just yachts and nothing more that endured such punishment in



U. S. S. Apache (lower) and War Bug (upper), 62-footers, two of the six Herreshoff boats ordered by members of the Eastern Yacht Club and sold outright to the Government for \$18,500 each



(Below) Paloma, an 85footer designed and built by Murray & Tregurtha, of South Boston

conditions hardly fit for well-kept ships to combat. They survived, too, when the ships were wrenched asunder by riotous elements. There is abundant proof that boats engaged in patrol lived out gales that made half-tide rocks of coast-

ers and sent them to the bottom with oakum flaunting and butts open as a basket. Wonderful indeed is the recorded performance of Tom, Dick, and Harry's little boat while manned by naval reserves and officered by men, in a number of instances, the product of intensive training.

It was go, get there, come back if you can. So far as I can learn the boats have come back, except two that were sunk in collision during fog that rolled them up in a blanket while on harbor entrance patrol and the dark mass of a ship took form and rode them under, all hands being saved. At the entrance to Broad Sound Channel, Boston Harbor, across the inner end being a submarine net as part of the defensive area, a patrol was maintained all through the war by boats of about 60 feet, which intercepted incoming ships to ascertain their business, give the password and instructions as to the position of the gate.

This gate was closed during thick weather and, also, for a long period of time between the hours of sunset and sunrise. On occasion, the harbor was closed on report that raiders were near the coast. Incoming vessels were then kept outside and nothing in port was permitted to put to sea. The station at the outer end of the channel was in vicinity of Finn's Ledge, west of Graves Light—almost over the spot where the six-masted schooner Davis Palmer, coalladen, foundered at anchor with no survivors in a northeaster and disappeared so completely that it was days later before her masts hove slantingly into view to mark her

Out there, their dark masses growing and fading as they careened on the long turns, hemmed by cruel reefs, through the cold night watches, the patrol was constant. Apart from common peril of the sea was the continual expectancy of assault by torpedo or shell or impact with a floating mine. Temperature below zero, spray freezing as it struck, the quartermaster hooking an ankle around the binnacle leg to somehow maintain a poise while speaking ships bedaubed with dazzle paint into wavering color so hard to judge with the sea steaming its vapor out of a hissing caldron. Godfearing lads, every one of them, out there enduring exposure and privation in tiny boats that we landsmen, who asso-

(Above) Twin-screw motor vessel Alacrity, designed by Cox & Stevens, built by Pusey & Jones

ciate yachts with summer scenery, might rest securely from invasion.

The service performed by this fleet in such a winter as last can only be known by those who have been in close touch with the situation, and the policy of silence was good at

the time when worlds were at stake. The surprise is, however, that the boats now are in such good condition. Intelligent care by men of practical experience accomplished that. The boats were overhauled at every opportunity, and, I may add, these opportunities were not of frequent occurrence. At the outset there was maintained a repair shop at Commonwealth Pier in the Boston section, and each base on the way down the coast of Maine was equipped with facilities for keeping the auxiliaries in shape.

At these repair shops were assembled parts of motors in quantity, and when it became necessary to replace a bearing or a connecting rod or, say, a cylinder or reverse gear, a new unit was substituted for the defective part in order to minimize time-taking detail, such as machining. One may count on the fingers of one hand the makes of motors in the special patrol, therefore it was not out of the question to carry replacements. Motors, I am told, have been lifted out of the boat and others bolted down and connected in less than an hour. Of course, the chasers, many having been built in Boston, were provided with three motors each, and there always remained three chances of covering a detail as quickly as weather or unforeseen circumstances permitted. It was cold and wet with the S. P.'s till Herreshoff began to deliver on the order placed by members of the Eastern Yacht Club for twin-screw flyers a trifle over 60 feet and with adequate protection for navigators and crews.

This necessity for adequate protection early was recognized in the smaller yachts taken over, and as soon as possible pilot houses were erected and stout signal masts provided. The question of heat, too, was solved by installation of heaters, usually of hot water type, for men soaked by icy water or chilled by frost could not be expected to maintain vigilant watch and handle the "ash cans," as they term the depth-bombs, intended to split Fritz like a herring, should he be surprised sowing mines or maneuvering for attack.

Everything that was done was done with the point of actual, practical service in view, to make them possible for men to live on for all times and in all weathers. Hulls were strengthened, pilot houses built, etc., etc.

My Ideal Auxiliary

No. 1 Victory, A 21-Foot V-Bottom Catboat

By George R. Law

N considering the Ideal Auxiliary the first essential to be considered is that we define the purpose of the ideal; for what is the ideal for one set of conditions may be decidedly unsuited for use with another. Hence in discussing the ideal we should have in mind at all times the conditions to which it is intended to apply.

In the design of the 21-foot catboat shown in the accompanying plans a definite use was in view and the boat made to fit the pur-

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Having for many years spent my spare time on a certain bay which has in a space of about 10x24 miles about thirty-three islands and is open to the Atlantic on one of the long sides with several small rivers emptying into it, I had long ago made up my mind as to the kind of a boat I would build for accommodating my wife and myself for week-end trips and the occasional vacation, using the bay as a cruising quarter with a trip out into the sea for cod, etc., when conditions permitted.

The boat desired was to be of shoal draft, one that could take the ground between tides without harm, to be first a sailing craft, but with power to negotiate the winding little tidal rivers and passages between the islands. We needed quarters two to eat, sleep, and if detained by rain or storm the cabin to be suitable to pass the time in comfort while

waiting for clear weather. The V-bottom type

The "My Ideal Auxiliary" Competition is open to every amateur of the country. There are no other restrictions and no limit to the size or type of the auxiliary which the designer may choose as his "ideal". Designs may be submitted any time up to May 15, 1919, but the earlier they are received, the better chance the designer has to have them published. The plans should be complete and include outboard profile, arrangement plans, sections, construction, details, lines, and a table of effects. A description of not over 2,500 words should accompany the plans.

For each design published we will pay \$35 and to the winner of the series will be presented \$65 worth of boat merchandles of the winner's choosing.

seemed to solve the problem of low cost and as to its being suitable for sailing anyone who has ever been down the Chesapeake and seen the oyster boats of that model thrashing up the bay in a strong breeze will not question their stability. Having been much interested in the Sea Wren class of the Jamaica Yacht Club that model was followed to some extent; the knuckle in the topside was omitted. The size caused some long con-

sideration but it was determined by the fact that a boat suitable for two to use could be limited to 21 feet, a larger boat being unnecessary, as it would be more expensive and difficult to handle, and accommodations for more than two persons were not desired.

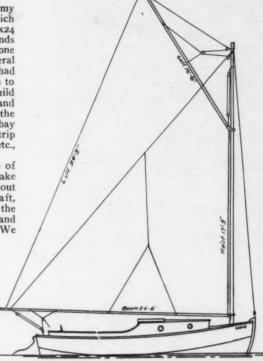
Two berths are provided with a pump toilet, built in forward, and a set of drawers forward of that. Under the bridge deck can be placed an oil stove for sum-mer, and if used in fall and spring, a small coal range.

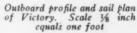
The cockpit is self-bailing for reasons of safety and conveni-When a boat is fitted with ence. a self-bailing cockpit there is not the unpleasant mess that is generally found on a boat which is partially open to the weather and fills up below with rain water between week-ends. All is dry and neat below and when in use the factor of safety added by this part of the design is decidedly of advantage.

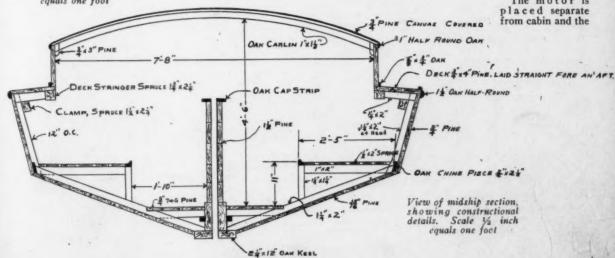
While at first the width looks excessive, you will note that the part below the waterline is sharp and should be easily driven;

very considerable flare all around adds to the seaworthy qualities of the model.

The motor is







bulkhead should be tight aft, so that the fumes from the engine will not escape into the cabin. In so small a craft it is not pleasant or healthy to have fumes of engine oil or gasoline present nor to have the hard-to-avoid dirt that goes with the engine installation. To place the engine under the bridge deck does not help much, but to place it in a box in the cockpit takes it out of the way and gives a chance for a sanitary cabin. There is also a decided element of safety in removing the engine from association with the cook stove and from the pipe and cigar smoke.

You all have seen the little hammock used in Pullman cars to put loose belongings in, well you will find one of these on each side of the cabin quite a desirable accessory. Also cleats across the carlins will give a place to store

charts, etc.

It would be best to provide a reverse gear or reversing wheel, although a two-cycle engine can so easily be reversed that some may try to get along that way. Personally I prefer the reversing wheel as it adds to the flexibility of control if wishing to troll or

to make careful landings single handed.

As to construction details, the midship section drawing shows that, and frames were planned to be 12 inches on centers. Knees should be put in at each side on the quarters and knees fore and aft to brace deck beams in the way of the mast, also a strong plank for king plank to put

mast through. In fact, it was my intention to put a number of small knees in proper places to stiffen the whole structure.

It was planned to weight the center board and to put an iron shoe on the bottom of the keel, the rest of ballast to be carried inside and well spread out over the whole boat, not concentrated.

The engine planned for this boat was a 6 h.p. Gray, but any of the standard makes could be used, but I would stick to the single-cylinder two-cycle type for this

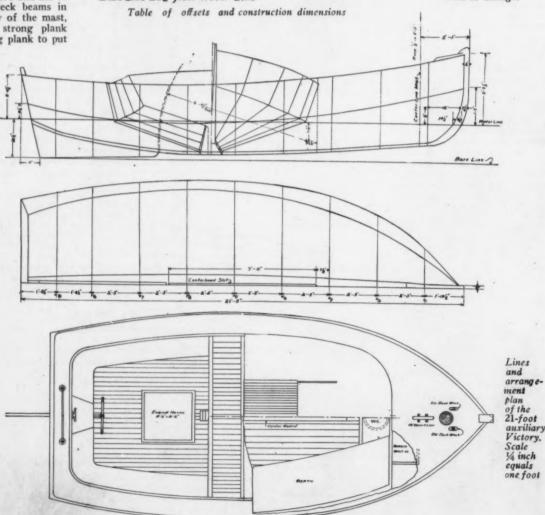
As a tender I plan on the good old reliable dory skiff, using one of about 10 feet overall by 3 feet 8 inches beam. This being small and light enough to be hauled on board by one man when on a long run and capable of being rowed into very shallow water and at the same time is to some degree seaworthy while the usual shallow, straight-sided, flatbottom skiff is most decidedly not.

This boat has not yet been built, it was planned in the first part of 1917 but the war caused my removal elsewhere

on work for the Ordnance Department and 1918 also passed without giving any chance to plan on such things as weekend pleasure trips so that it is still a dream of the future. In going over the drawings this month I cannot find one feature I wish to change.

TABLE OF OFFSETS 21' V BOTTOM CAT STEIN 1 2 3 4 5 6 7 6 9 THAN \$3.0 4.97 4.47 4.0% 3.001 3.02 3.7.1 3.6% 3.7.7 3.80 FHZ 37-4 3-1-4 2-7-4 2-3-0 1-11-5 1-9-6 1-9-15 1-9-6 1-11-6 2-2-5 27-9-5 Edge of Chine 0-9-0 0-74 0-84 03-12 03-13 03-3 0-82 0-44 /-6-13 Bottom of Keel 1104 347 433 400 443 580 402 474 436 3112 Deck Line . 144 274 363 444 452 463 449 444 375 312 Edge of Chine 0-2-2 0-30 0-32 0-4-4 0-531 0-6-0 0-6-0 0-5-8 0-4-7 0-4-7 0-2-3

Dimensions in Ft. Inches and eights to Outside of Planking Base Line 22 from Water Line



SMALL MOTOR BOATS

Their Care, Construction, and Equipment

A Monthly Prize Contest Conducted by Motor Boatmen

Questions for the April Issue

1. Is it possible to keep a boat free from barnacles in salt water? If so, how?

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Suggested by H. A. H., Baltimore, Md.

How can a small crew most easily and safely launch a heavy cruiser of moderate size after her spring overhauling is completed. Blustrate if necessary.

Suggested by A. O. G., Portland, Me.

Explain the steps which should be taken to put into commission a hull which has been out of the water for one or more summers and has been more or less neglected.

Suggested by W. B. M., Newburgh, N. Y.

Rules for the Prize Contest

A NSWERS to the above questions for the April issue addressed to the Editor of MoTOR BOATING, 119 West 40th St., New York, must be (a) in our hands on or before February 25; (b) about 500 words long, (c) written on one side of the paper only, (d) accompanied by the senders' names and addresses.

The name will be withheld and initials used.

QUESTIONS for the next contest must reach us on or before February 25. The Editor reserves the right to make such changes and corrections in the accepted answers as he may deem necessary. The prizes are: For each of the best answers to the questions below, any article or articles sold by an advertiser advertising in the current issue of MoToR BoatinG of which the advertised price does

not exceed \$25, or a credit of \$25 on any article which sells for more than that amount. There are three prizes—one for each question—but a contestant need send in an answer to only one if he does not care to answer all.

For answers which we print that do not win a prize we pay space

For answers which we promote a rates.

For each of the questions selected for use in the following month's contest, any article or articles sold by an advertiser advertising in this issue of MoToR Boating, of which the advertised price does not exceed \$5, or a credit of \$5 on any article which sells for more than

exceed \$5, or a credit of \$5.00 that amount.

All details connected with the ordering of the prizes selected by the winners must be handled by us.

All the Country Prepares for Next Season

Answers to the Following Prize Questions Published in the December Issue

Write an article encouraging owners and others to take up motor boating next season and to make their plans early,

Start with a Small Boat

The Prize-Winning Answer THE need of summer recreation calls to the average working citizen in rather a vague way and too many of us idle away the best weather, year after year, in a planless way and miss the opportunities for enjoyment and bodily good. The one best medicine for spring fever is preparing for a pleasant and healthful use of the summer.

Good weather outings are various enough by train or public boat, auto or with your own boat. You are frequently urged to "paddle your own canoe," or "roll your own," or "drive your own car"; now consider one more of the "own" series-have your own boat. Make a moderate investment in floating stock, explore the nearby waters and shores for one season, taking one real vacation cruise if you can, and with the next coming of spring you will have a worth-while hobby to indulge. And through it all, subscribe to a good boating magazine to secure suggestions for your own use and to know what others of the craft are doing.

You will find the sport less expensive and likely less troublesome and more pleasant than your Sunday jaunts in the flivver; certainly far and away better than joining crowded excursions by rail or water and possibly about as cheap.

Camping, picnicking, fishing, hunting, kodaking, even just plain loafing for rest, all are enlivened and enjoyed to better advantage by way of your boat. Whether you live near coastal waterway, river or lake, large or small, salt or fresh, try at least a one season membership in the guild of boatmen and chances are that the next season you will want to advance a degree, either cruising farther or having a larger boat or improving the one you have.

Just for curiosity, spread out a fairly large scale map of your locality and see how much water apparently is accessible. If you live near the coast, secure and study the Coast Survey chart showing protected waters nearest you; talk with any power boatman of your acquaintance and find out where you might run within week-end distance and cruising distance.

Look quietly around your locality for boats idle or for sale, get the latest copy of a good boating magazine and look carefully over the advertising pages for moderate priced boats; you may find one near you. Then if you do find anything of interest, get busy early before the season is on, not only to secure your craft but to fit it out in time.

A few timely suggestions seem in order without encroaching on the subjects of buying or cruising. If you are not experienced with boats, start small. If you can afford a moderate sized cabin boat, by all means get it, for you will be assured of more comfortable travel, protection from inclement weather and overnight quarters aboard on week-end trips. Choose a type of hull suited to the waters you expect to travel. If any of your cruising courses lie over shoal waters, get a light draft boat with a rather flat section amidship, as she will be easier to get off if grounded and will not careen if grounded in tidal water. For protected grounds where the weather doesn't kick up much, you may prefer speed to beam and steadiness; but for any travel where you may encounter stiff weather, consider first of all beam and seaworthiness.

If for economy or by preference you get an open launch, see that the ignition system is protected against spray, rain or other moisture; if convenient, box in the motor with a removable cover; provide a galvanized tank or cans for drinking water and rain-tight lockers for batteries, tools, food, etc. Also a folding hood forward will prove a good investment for comfort. For a camp trip with an open boat, secure a rowboat to carry tent and bulky equipment.

If you must have a fast open boat, but one which you will call upon for service other than speed, get a V-bottom hull powered with a substantial motor.

Whatever type of boat you begin the game with, you will find improvements to make to suit the ideas you develop; and in time your craft will in some measure represent your nautical experience and your notions of convenience afloat.

E. L. B., Jacksonville, Fla.

Now Is the Psychological Time

I T would seem now is the psychological moment for those who love the water and boating to take heed and prepare for next summer. "The Old Story" anticipation or realization and which gives the most enjoyment.

The looking forward, making plans, the kind of boat desired and changes to make, the best motor, speed and comfort all go to make one think that after all anticipa-

tion gives more pleasure.

Then comes the moment, frought with trembling emotion, when we try the vessel of our choice, in actual semi-working order, on a fine spring day. All our efforts at perfection are tried out with varying results; joy almost complete with freedom from care, "except possibly the motor." The world becomes a haven of pleasure and realization takes first place.

So many beginners imagine that speed means pleasure and fame, overlooking stability, reliability, and comfort, and centering their thoughts on the unobtainable with the impetuosity of passionate desire. Only too often to realize that they can't have their cake and eat it.

No mortal knows just the boat he wants, or how he wants it, until he can get something that can outswim a baracuta, dive like a seal, steady as a rock, with all the comforts of a seven-room flat for eighty-five cents

on a dollar.

No large vessel ever brings the joys complete that goes with a responsibility all your own. I have known old sea-dogs to handle a small sail boat and capsize her again and again and end up by admitting that they never knew what excitement and knowledge of oneself a small

boat may bring to the surface.

To be only a passenger on a large vessel, purchased at great expense, and without the knowledge or ability to navigate and run her, is indeed a sorty story and can never bring a keen pleasure to the so-called, lucky owner. To do your own work and do it well, and to reach a point of perfection by arriving at your destination without help and with wind, sea and darkness as companions and beat them to it, what more could the boat owner ask except heaven.

In a way we all need a tonic of thrills to take us out of hum-drum and a rut, and make us better to live with and more patient with others. Nothing for man or woman gives good health, recreation and pleasure undreamed of by the uninitiated as being on the water in a vessel of your choice, lazy or active as your whim desires. Nature, wild or mild, surrounds you and home is taken with you.

R. B. R., Lieutenant U. S. N. R. F.

Build, and Build at Once!

HAVE interviewed leading yachtsmen as to prospects for next season and, without exception, their forecast is reassuring. The motor boat game, they say, is to come along strong, particularly with craft of moderate size that have not been in commission for the past year or so. In addition, the demand for new motors should be heavy because owners who plan to celebrate resumption of sport won't be niggardly with dollars.

The question arises whether there will be enough boats to go around in face of the scramble certain to ensue when boys who have had a taste of the sea as naval reserves fall into their stride as civilians. More than 100,000 physically fit fellows manned harbor, coast, and off-shore patrol vessels and the 110's and, naturally, should look to the water for recreation in days to come after fashion of the archaic windjammer who loves to settle down where the tide ebbs and flows to putter and play with boats.

Much of the war's naval training has been in motor craft, and by that token home-coming boys should take to that type. Capable navigators and machinists have multiplied in number and their school has taught self-reliance and quick decision, two qualities so essential to safety afloat. They have, in the majority of cases, manned able boats equipped with powerful propelling plants and high-strung auxiliaries, and are accustomed to a fair degree of speed. It would seem, therefore, that these reserves will choose for pleasure purposes boats that in a general way follow characteristics of the sectional patrol or submarine chaser.

I am confident that practically every boat loaned to the Navy Department by patriotic individuals will be returned to owners long before the next yachting season, and as the Government is concerned such boats will be in good condition. Furthermore, these boats will be placed in commission almost without exception as a fitting manner to celebrate conclusion of peace. Should there be any sentiment as to hiring professionals to man such boats, there should be no trouble whatever in signing a crew from ranks of the reserve and the profes-

sional would be left to the merchant marine.

Yacht yards are likely to be overwhelmed with orders and those who come late are in for annoying delay. Yacht brokers assure me they are swamped with inquiries for motor craft and express surprise that so few desirable boats are on the market. The explanation is that owners are noting trend of events and prefer to hold than sell. Then what is there to do but build, and build at once if you intend to own a boat. Otherwise there's bound to be a lot of disappointment when the apple blossoms come again.

Don't put off a day longer with yachting plans. If you have no boat and wish to own one, build or buy

Boston, Mass.

The Tide Is Coming In

OW is the time to enlist in the motor boating army. If you already own a boat, begin now to plan for the coming season. If you do not own a boat, now is the time to get one. "But why now?" you ask. Simply because now, after a period of enforced quiescence, the motor boating world is waking up. The war will undoubtedly have had a tendency to increase rather than lessen interest in yachting. Thousands of young men who before the war were rank land lubbers have now, after their experience in the Navy, for the first time realized the pleasures and benefits to be derived from owning and operating of a motor boat.

The manufacturers of motor boats are already preparing for an increase in production. The need during the war for an absolutely dependable motor will very probably have resulted in the discovery of devices and improvements, which when applied to the motor boat of the future will make it a much more dependable and

more easily operated craft.

But now is the time to plan for the coming season. The boats returned by the Government to their original owners will in all probability need quite a few alterations and improvements to again adapt them to their former pursuits. There will be a rush in the spring to have these repairs made, and the owner who begins as soon as his boat is returned to him will run no risk of being without the use of his boat, for a month or more, at the time when he could get the most enjoyment out of it.

There is a tide in the affairs of yacht clubs which when taken at its flood leads on to success. The motor boating tide is coming in. Trim ship and be ready to sail.

H. A. H.,

Baltimore, Md.

Beating the Ice Man

Answers to the Following Prize Question Published in the December Issue

Describe and illustrate a satisfactory and practical method of keeping provisions aboard when no ice is available.

Cold from Evaporation Prize-Winning Answer

HE question of keeping provisions at a satisfactory temperature on a small boat has always been one of more or less trouble and inconvenience.

If the boat is used in northern waters, considerable cooling effect may be obtained from the circulation of sea water through pipe coils, placed in the box which is to be used for the storage of the provisions. This circulation will be natural and continuous, if the water inlet is at

the lowest point in the hull, and the outlet about three or four inches below the waterline. In many parts of the world ice is unknown,

ous vessel, which is set in a shallow pool or dish of water. This vessel absorbs water which is constantly being evaporated, and evaporation requires heat. The necessary heat is taken from the contents of taken from the contents of a vessel and the surrounding at-In this manner the

contained food is kept at a temperature of many degrees below that of the outside air.

As a simple, satisfactory, and practical substitute for the icebox, the accompanying sketch and description is submitted:

A metal box is constructed of any suitable dimensions, such as

those shown. A close fitting top or lid is made which should be double, the upper and lower sides about three inches apart, and the space between filled with cork, or other insulating material. Copper or brass is the more desirable metal, but a good quality of galvanized iron will prove satisfactory. Of the same material make the tray in which this box is to stand.

Provide a top as shown to keep the water it is to hold from being thrown out by the motion of the boat. Around the four sides of the box place two or three layers of heavy toweling, allowing it to extend two inches or more below the bottom as shown. This outfit placed in a well-ventilated compartment, and the tray kept nearly filled with water will maintain your provisions at a reasonably low temperature. Use only clean fresh water, and fill the tray every twenty-four hours, or more often if necessary.

The method of operation is obvious, the toweling by capillary attraction absorbs water from the tray. This water, continually evaporating, secures the necessary

FOR ADDWG WATER gine.

and food is maintained at a suitable temperature by being placed in a por-45-

ELEMATION HALF SECTION C. L. B. designs an ice-box which needs no ice

heat largely from the box and its contents.

The owner of a fortyfooter, perhaps even a smaller boat might find it practical and most convenient, to install a refrigerating system, operating on the compressed air principle.

The refrigerator should contain compartments for food, and an ice making box. Pipe coils surround this box and are connected, through a cooler, with a small air compressor operated by the en-

The air pressure for satisfactory results, may be from fifty to seventy pounds per square inch. Sufficient ice should be made in a day's run to last until the engine

is again started, or the compressor may be operated by a small electric motor on the larger yachts.

Air when compressed rises in temperature, this compressed air is then cooled by water circulation, and allowed to expand in pipes. In returning to its natural pressure this air absorbs heat, and temperatures far below

the freezing point of water may thus be obtained.

C. L. B., New York, N. Y.

The Earthenware Cooler

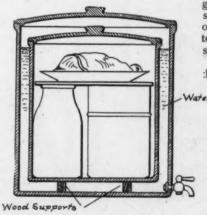
EARLY every gasoline engine operator is fa-miliar with the phenomena of "cold by evapora-tion" and many of us have seen frost form on certain types of carbureters. Cold may be thus produced by the evaporation of any volatile liquid, including water and we may observe a practical application of the principle in the Cuban water jug. This vessel is made of un-

glazed earthenware and water slowly seeps through it, evaporating on the outer surfaces, thereby reducing the temperature of the contents to a considerable degree.

The drawing shows a development of :he principle for the preservation of per-

ishable provisions aboard a boat. It consists of two earthenware crocks, one of a three- and another of a sixgallon capacity, the outer one being unglazed. The provisions are placed in the inner crock while the space between the two is filled with clean water. Seepage, or to use a more scientific term, osmosis, will keep the outside damp and if the cooler is placed where a draft will reach it, the contents will be kept cool.

J. F. C., Meriden, Conn.



J. F. C. uses two crocks

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A Miniature Ice Plant and Water Refrigerator

CCASIONALLY one cruises away from the populated districts, where ice is unobtainable and the ice-box capacity is not enough to last. Then is when we wrap our last bit of ice in newspapers to help keep it and try to use up the perishables before the refrigerator cools off.

Don't do it again. You can set up, in a few minutes, a miniature ice plant that will make all the ice you need, and freeze your ice cream and fruit ices at short notice

at but little expense.

Place the water or preparation to be frozen in a can or pail and immerse it to the brim in a weak dilution of sulphuric acid and water. Into the dilution sprinkle a handful of common Glauber's salts, and the resulting cold is so great that the water or other liquids immersed in the dilution are readily frozen solid in a few minutes with but little trouble. Bottles may be cooled by a momentary immersion in the mixture.

The chemical reaction between the sulphuric acid dilution and the Glauber's salts in such as to absorb consid-

Iceless Cooler

N order to keep provisions and food supplies in a wholesome condition it is necessary to use refrigeration to attain a sufficient low temperature to arrest bacterial development, which causes the decay or spoiling of foodstuffs. A temperature of 50 degrees F. is commonly considered a safe one at which foods may be kept for several days with little danger of their spoiling.

The general method, of obtaining a reduced temperature is by means of ice which has the property of absorbing heat from its surroundings and consequently lowering the temperature. Other methods of absorbing heat are by mechanical refrigeration with brine solutions, the expansion of compressed gases, such as ammonia and by

the evaporation of liquids.

The requirement of cooling foods on a small boat without using ice also precludes all mechanical means thus leaving evaporation of liquids as the only available simple method. Liquids such as alcohol, will accomplish the desired result but have the objection of cost. Water, on account of its availability, must be made to answer.

In order to adapt evaporation several things are neces-







Several methods suggested by W. B. M. to keep provisions cool on shipboard without the use of ice

erable heat and the water being the nearest source of heat, gives up its heat to such an extent that the water is frozen. Caution! Never pour water into the acid but

slowly drop the acid into the water.

An improvised or home-made refrigerator may be made by setting bottles of water (?) milk, cream, etc., and meats in glass containers, wrapped in wet cloths reaching to the bottom of the bottles, into a shallow granite ware pan partially filled with water, preferably cold water. Articles of food in shallow dishes may be kept by inserting an ordinary earthen flower pot over them and wrapping the flower pot the same as the bottles.

Place the pan in a shady position where there is a

good draft of air, as just inside a port on the shady side of the boat. An air scoop on the port will aid in forming the draft. The pan should be prepared morning and night and you will have a serviceable refrigerator at no expense ex-

cept for water.

To enlarge the capacity of the water refrigerator make a box with sides and ends of wire netting and board top and bottom. One side to be hinged for a door. On top of this place a deep earthen dish and keep it filled with water. Around the entire

box wrap a piece of burlap, allowing the upper end to extend well into the water. W. B. M., Newburgh, N. Y.

sary. A compartment to contain the articles to be cooled, a medium to be evaporated, and means for applying and renewing some effectively to insure rapid and continuous evaporation.

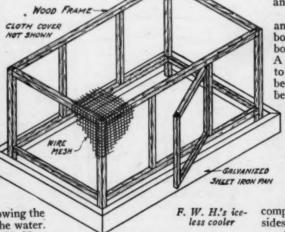
The device to be described should accomplish these things and succeed in cooling foods sufficiently to preserve them for a day or two. It must be understood at the start that it is not possible to achieve the same results as with the use of ice.

The compartment may be constructed by securely attaching to a light wood frame, a covering of galvanized wire netting about one-quarter or one-half

inch mesh. The size of the box must depend somewhat on the desired capacity and the available space. Make provision for a door and keep the bottom of the box several inches above the bottom of the corner posts. A galvanized pan large enough to hold the box should also be provided. Now, there will be something for the ladies to do! This wire mesh box

is to be covered with a cloth cover which can best be made by sewing several thicknesses of cheese cloth between an inner and outer piece of cotton flannel. This must be of such a size

as to entirely enclose the compartment top, bottom and sides, with the sides carried (Continued on page 98)



Keeping the Exhaust Line in Condition

Answers to the Following Prize Questions Published in the December Issue

Devise a scheme for cleaning the muffler and exhaust piping of salt, mud, carbon or other deposits without dissembling.

Acid Treatment Most Thorough The Prize-Winning Answer

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GOOD muffler well designed and properly installed should effectively reduce the noise of the exhause for years without attention. After several years'

use, especially in muddy or salt water, there is apt to collect on the inside of the silencer a thick incrustation of rust, mud, carbon, and other clogging anaterial.

The sediment and corrosion is worse in salt muddy water, although salt and mud are not always necessary for a muffler to corrode and collect foreign matter in sufficient quantities to cause excessive back pressure on the motor; making starting difficult and a noticeable loss of power is a direct result. This is a condition often unthought of until all other causes of loss of power and hard starting have been investigated.

The usual method of procedure is to soundly rap the muffler and exhaust line with a Stilson wrench. A piece of 2x4-inch hemlock would be much safer, as with the wood there is little danger of breaking the casting or puncturing the sheets. The rapping may prove a valuable temporary remedy but the scale is only loosened and none but the smaller pieces are blown out by the

The scale formed in the muffler and exhaust pipe is not unlike boiler scale and will respond to a similar treatment. Boiler compounds are used to soften the water and combine with foreign matter to form a sub-

stance which will not collect in a braid scale, the re-

sulting sediment being easily removed.

To effectively remove the scale and sediment from the exhaust pipe and muffler it is not necessary to dismantle the equipment except in certain rare cases where it is impossible to break the piping connection close to the motor.

A solution of from two to three per cent. fluorhydric acid will loosen from the casting and piping and dissolve the accumulation of rust and silicious matter, leaving

the metal clean and bright.

Disconnect the flange at the motor and put in a blind gasket, or where there is no flange break a joint and cap the end. Tightly plug the outer end of the exhaust pipe and fill the pipe and muffler to the top with the above described solution, allowing two or three hours for it to act. In obstinate cases a second application may be necessary. After treating wash with lime milk to neutralize the acid and then rinse with clean water.

Fluorhydric acid is an active reagent on any silicious matter that might collect in the muffler, and upon iron rust, but it will not readily attack sound metal. Its action on silicious substances is such that it must be kept in metal bottles as a glass container would soon be

eaten through.

After having thoroughly cleaned the muffler and exhaust line and before operating the motor paint the inside with a heat-proof paint. The following formula is for a paint to be used on the inside of boilers, and will be found a satisfactory protection for the muffler and exhaust line, it being fire- and water-proof when used with a wet exhaust.

Thoroughly mix equal parts by weight of train-oil, horse fat, parrafine, and finely ground zinc white. To this mixture add four parts graphite and one part soot made into a paste with one part water and about one-

tenth part carbolic acid.

The horse fat and the zinc oxide make a soap very hard to fuse, which adheres strongly to the metal and

binds the graphite and the soot. The parrafine waterproofs the compound. This paint is so tough and elastic that any scale collecting on it may be loosened with a

wooden mallet without injuring the paint.

The paint in some cases may be applied by spraying, or plug all the openings and fill the muffler. Then apply air pressure through a Scheader valve attached to a plug. The air will force the paint into all pitts and crevices or leaks, effectively closing them. When dry the outfit is ready for use.

W. B. M., Newburgh, N. Y.

The Kerosene Bath

EROSENE as a solvent for carbon, soot, slimy mud and other deposits, which commonly occur in exhaust systems is the least expensive and most easily procured ingredient of several that would work to an advantage in removing these accumulations without necessity of dismantling and scraping out with brushes and knives.

To apply the kerosene treatment it is essential that the exhaust piping and muffler system should be gasand water-tight, as is done where part of the cooling water from the engine cylinders is run through the

A wooden plug with several thicknesses of canvas or a cork plug is used to close the exhaust end of the system, that is the end, of the outboard pipe. The circulating water is usually joined to the exhaust pipe about a foot from the motor either by a plain screwed union or a regulating valve.

It is only necessary to open the valve or unscrew the union at this point enough to insert a funnel through which about two gallons of kerosene, coal oil as it is sometimes called, is poured.

Two gallons will usually fill the muffler and piping, though the quantity depends upon the capacity of the parts, the main thing is to fill the entire system with the oil.

The time to allow the oil to remain depends upon the urgency for the use of the boat after filling. Leaving the oil indefinitely will do no harm and the parts will be benefited to the extent of a thorough cleaning, however. Leaving the oil in the system over night will accomplish a lot toward removing the deposits. If left, only over night the coal oil can be caught in a bucket and after allowing the liquid to settle can then be used over again several nights successively. Some owners have a practice of charging the muffler and exploding commonly known as muffler shots, to dislodge accumulations. This is done by cutting off the ignition momentarily, and the unexploded charges entering the muffler, are ignited when the switch is turned on again. The practice is not commendable, as it is likely to result with the inexperienced, in bursting the muffler or at least opening the seams and unions causing leakage of gas and water.

A strong solution of lye and water can be used if it is desired but this should not be allowed to remain longer than half a day otherwise the lye will attach the threads and unions and when it is required to remove the muffler system the parts will be found eaten badly and probably require replacement of parts. For good results with the least liability of damage, kerosene is

possibly the best of all.

G. A. L., Washington, D. C.

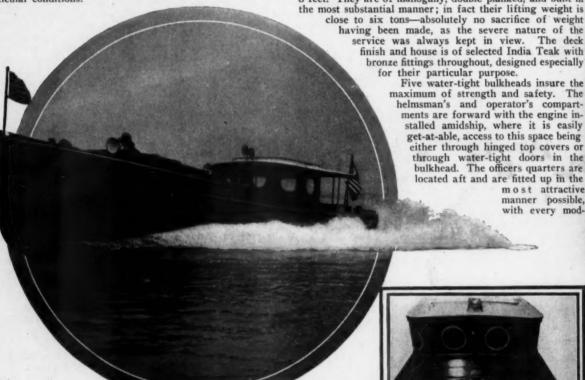
Tenders for the Brazilian Navy

NE of the interesting jobs put through during the War was the designing and building of a number of tenders for the warships of the Brazilian Navy. The honor of being selected to do this work for a foreign power fell to the lot of the Luders Marine Construction Co., of Stamford, Conn., and the photographs show the boat which was especially designed to suit the particular conditions.

for a distance of 8 feet, and about the same distance from the bow; the round-bottom feature has been worked into a distinct V-type. The result has been that, while all the seaworthiness of the round-bottom is maintained, the added feature of the quick lifting bow and the dryness of the high-speed Vbottom is secured. The effect worked into the boat is very bleasing. The length of these boats is 35 feet, with a beam of 8 feet. They are of mahogany, double planked, and built in the most substantial manner; in fact their lifting weight is close to six tons—absolutely no sacrifice of weight

> bronze fittings throughout, designed especially for their particular purpose.
>
> Five water-tight bulkheads insure the maximum of strength and safety. The helmsman's and operator's compartments are forward with the engine installed amidship, where it is easily get-at-able, access to this space being either through hinged top covers or through water-tight doors in the bulkhead. The officers quarters are located aft and are fitted up in the

most attractive manner possible, with every mod-

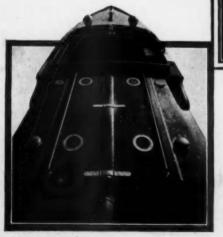


The outward appearance of the boats is not unlike tenders for our own naval ships

A 100-h.p. Sterling motor gives the boats a speed of 18 miles per hour

These boats follow somewhat in appearance the tenders that are supplied by the Navy Department to our own warships. principal diversions from the U.S. standard model being that the steel shelter houses of the American boats prove to be quite impractical in tropical climate, and a proper shelter in this case had to be devised. One that would give adequate protection from the sun or rain, and yet in fair weather be capable of being opened up to get the benefit of all possible ventilation.

A new feature of these boats, and one that has probably never been resorted to before, is the unusual combination of V-bottom and the orthodox shaped hull. These little launches are roundbottom boats of good dead rise for almost their entire length but



A view of the forward cockpit and engine compartment with hatches closed

ern convenience employed throughout. The power plant consists of a six-cyl-

The power plant consists of a six-cylinder 100 h.p. Sterling engine, electrically started, and with an additional electric equipment to furnish light throughout the boat. The engine, while capable of high speed, has a propeller wheel designed to maintain about 900 r.p.m. as a maximum. With these revolutions a sustained speed of 18 m.p.h. is obtained. This boat made its trial trip in the heavy winds of November and December on Long Island Sound, and has in every way borne out the designers ideas. The Luders Co. certainly did itself proud in the construction.

Bayside Yacht Club's Wonderful Honor Roll

This Long Island Sound Club Had the Greatest Proportion of Members in the Service

THIRTY-SEVEN members of the Bayside Yacht Club of Bayside, L. I., went into the Naval Service, forty-four entered the Army, a total of eighty-one members serving their country. This club has a membership of 340, therefore, its contribution to the country's fighting forces was twenty-four per cent. of its membership—a record which, as far as we know, is not bettered by any club in the country. club in the country.

Sixty per cent. of the Bayside members in the forces saw

foreign service, four of whom were killed in action. Those to make the supreme sacrifice were Corp. William A. Leonard, Roland E. Phillips, Charles B. Struthers, and Corp. Charles B. Stone.

The names of the members of the Bayside Yacht Club who joined the colors are as follows:

Navy—Lieut. Walter L. Powers, *Lieut. Frank L. Stiles, Lieut. Walter S. Dayton, Lieut. Walter J. Lee, *Lieut. Malcolm Mackenzie, *Ensign Alexander W. Moffatt, Ensign



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Ensign Walter P. Grossmann, U. S. N. R. F.



Ensign Donald H. Cowl, U. S. N. A. R.



Chief Yeoman Anson G. Pur-chase, U. S. N. R. F.



Lieut. Frank L. Stiles, U. S.



Lieut, Walter L. Powers, U. S. Naval Militia



Sheldon W. Deardon, Marine Corps



Ensign E. Leonard Beard, U. S. N. R. F.



Quartermaster Louis C. Warner, Jr., U. S. N.



Edwin Logan, U. S. N. R. F.



Charles B. Struthers, Jr., U. S. Marine Corps, Died of Wounds



Quartermaster J. Paul Falconer, U. S. N. R. F.



Donald Cowl, *Ensign Walter P. Groszmann, Ensign Norman E. Donnelly, *Ensign Leonard E. Beard, *Ensign Fred C. Smith, Ensign John Adikes, 2d, *Q.M. C. Lawson Willard, Q.M. J. Paul Falconer, *Q.M. Louis B. Warner, *Q.M. Ferris P. Smart, *Q.M. Edward G. Walsh, *Q.M. Charles H. Medicus, Richard R. Walsh, *Arthur Logan, Charles A. Gould, 2d, *Anson G. Purchase, Edwin Logan, *Carlton Copp, William Nash Webb, Harold C. Vause, Richard Dorgan, Bruce Aitchison, *Bertram Darling, Howard Keppel, Oliver Alford, Charles Norton Thomas, Val P. Fogh, Sheldon Deardon, *David H. Markell, Edwin Shuttleworth, †Charles B. Struthers, Jr. Army—*Major George Sykes, Major Bradford Butler, *Capt. Edward C. Welsh, *Capt. George F. Miles, *Capt. F. G. Huntington, Capt. Marshall L. Coleman, *Capt. Charles T. Arrighi, Capt. William A. Kenyon, *Capt Edward B. Hine, Capt. L. G. Peed, *Lieut.

Walter M. Collins, *Lieut. P. W. Kerr, *Lieut. Charles M. Swezey, *Lieut. Frank H. Van Winkle, *Lieut. Van Wagenen Pingry, *Lieut. Charles H. Mellor, *Lieut. J. C. Crisman, *Lieut. Philip E. Langworthy, *Lieut. W. S. Hawkins, *Lieut. Claude G. Leland, *Lieut. Robert D. Boyle, *Lieut. Philip Benson, *Lieut. Francis Waken, *Lieut. Percy C. Hope, *Lieut. H. P. Rust, *Lieut. W. W. Knowles, Lieut. Harry W. Everett, *Lieut. Howard R. Baker, Lieut. G. P. Busch, Jr., Sergt. Douglas Van Riper, †Corp. William A. Leonard, †Corp. Charles B. Stone, *Corp. Henry K. Adikes, *Walling E. Harvey, †Roland E. Phillips, *Thomas F. Herrick, *George J. Gillies, Lewis A. Hallock, *George Frey, George W. Shields, George I. Barber, David H. Woodruff. Y. M. C. A.—*Frederick G. Randall, *Charles L. Willard.

*Indicates foreign service.

+Indicates killed in action.



Bertram Darling, U. S. N. R. F.



Quartermaster C. Lawson Willard, U. S. Naval Militia



Arthur Logan, U. S. N. R. F.



Quartermaster Ferris Smart U. S. Naval Militia



Quartermaster Edward G. Walsh U. S. Naval Miluss



Ensign John Adihes, ad, U. S. N.



Ensign Fred C. Smith, U. S. Naval Militia



Carlton Copp, U. S. Nava. Reserve Force



Ensign Malcolm Mackensie, U. S. Naval Militia



Charles Norton Thomas, U. S. N. R. F.



William Nash Webb, U. S. Naval Militia



Quartermaster Chas. R. Medicus, U. S. N. R. F.

When the War Came Close to New England

How the Down East Motor Boatmen Were Found Ready When the First Call to the Colors Was Sounded

By Allan O. Goold

N the old neutral days now half forgotten, before the Stars and Stripes took their place beside the Tricolor and the Union Jack, there were in every community groups of men and women who thought that they foresaw an inevitable day not far ahead when the might of Uncle Sam must be arrayed on the side of right as exemplified by the Allied cause. These preparedness advocates were called almost everything but patriots by their peace-at-any-price

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I doubt if the members of the Portland Yacht Club or the Portland Power Boat Association were at heart more bloodthirsty than their fellow men. But I never heard preparedness better supported than at the meetings which were held during the early years of the Great War at the hospitable sningled clubhouse at the end of Merchant's Wharf. And the way the boys sang Tipperary long before Over There shingled clubhouse at the end of Merchant's Wharf. became our popular favorite was worth going miles to hear. The fact that their sympathies were all with the boys who were leaving Piccadilly and Leicester Square for the bloodstained fields of Flanders needed no further proof.

A considerable time before the war cloud appeared on our peaceful horizon the local Naval Reserve felt the need of an executive officer who could take the helm with a strong hand and steer their organization into more prosperous waters. The Web Feet accordingly approached our commodore, Reuben K. Dyer, that idol of Portland yachtsmen, with an offer of the command of the Maine division of the Naval Militia. This included the ship's company at Rockland and our Portland Battalion of two companies whose armory was in a long two-story building on Port-land Pier. Rube, as most of his yachting followers know him, was a thorough racing man and had, during the many years which had regularly witnessed his reelection, brought the old Portland Yacht Club up to a rank second to none in New England. But our Commodore was not an Annapolis man and had, up to the time that this appointment was offered him, given but little study to Naval matters. The proposition looked difficult if not impossible, so, of course, the Commodore accepted the command.

Of the long evenings of study, the knotty problems which were constantly coming up for his solving, the never-saywere constantly coming up for his solving, the never-say-die spirit which has since made this yachtsman-naval of-ficer's career a brilliant one, most of us heard but little. We did know, however, that the Maine Naval Militia gradually became more and more popular. That after the boys returned from their summer tour of duty aboard some war vessel, reports of efficiency would come trickling

in from the Naval officers in charge of their division.

We members of the Portland Yacht Club would not accept his resignation. If Rube could be with us but a part of the time we felt that he could accomplish more in that interval than most men could achieve if they gave their entire attention to our organization. His popularity never At our banquets the mere mention of his name would bring every man to his feet, a cheer on his lips. Every festivity included the singing of that touching ballad, "That Faded Old Red Vest Rube Dyer Wore," sung to the refrain of "That Little Old Red Shawl." It was more than a song, it was a ceremony. The look of good-natured tolerance as the Commodore rose from his seat at the head of the table to smilingly how his thanks was always the size. the table to smilingly bow his thanks was always the signal for tumultuous applause.

When the threat of war assumed a sinister aspect in 1916, the Portland Naval Reserve began drilling early and New members flocked in to increase the strength of the two companies. Everything that could be done to bring the equipment up to war requirements was done by the tireless commander. Finally the boys were pronounced ready to move at an hour's notice. Orders were momentarily expected. The armory was guarded day and night by armed blue jackets under a trusty petty officer.

Through the winter of 1916 an officers' navigation school was held weekly in the commanding officer's quarters in the end of the armory. Several of us availed ourselves of the invitation extended to Yacht Club and Power Boat Association members to join this class. Lieut. Hugh C. Allen, U. S. N., then the Portland Naval Recruiting Officer, was instructor most of the time but was relieved by Ensign McGowan and other Annapolis men when they were available. Lieut. Commander Dyer himself also instructed the class occasionally.

The beams of a powerful searchlight on the Coast Guard Cutter Ossipee, which was assigned to guard the Grand Trunk ocean sheds (being set so as to sweep the waterfront), flooded the little office with light, and added to the warlike feeling which pervaded the entire building. On leaving the quarters on the ground floor a glimpse was obtained of the clothes bags of the men stacked up and neatly lashed, with other belongings of the organization in stout wooden chests piled near by. The petty officer on duty would recognize us and pass us through the guard out upon

There came a day when the command was under orders to leave for Boston. The day was bitter, with snow on the ground and more sifting down from the dark clouds overhead. The people turned out to see them go and give them a hearty send-off. Behind the column came wagons loaded with the dunnage which was to accompany them. No one in line wore overcoats and some bystanders spoke words of sympathy, for the civilian onlookers were bundled to the ears. We afterward learned that the new men could not get their pea jackets in season so the order went out, "blue uniforms without overcoats" and not an officer or man marched better protected than the newest recruit. Dyer and his officers had the long service overcoats which would have doubtless been a genuine comfort. But like true officers they shared the hardship with their men.

No one in Portland has seen this little command as a unit from that day to this. It is doubtless broken up and widely scattered. What Rebuen K. Dyer's rank is today I do not know. He was given the old dynamite cruiser Vesuvius He was given the old dynamite cruiser for his first command. Next we learned that he had taken a large converted yacht across and was guiding convoys through the swift tides and ragged rocks of the Bretton Stories of a breakdown in the engine-room one night in a gale of wind and later after both masts had carried away near the deck, of how her commander with characteristic pluck and ingenuity planned a jury rig and brought his ship safely into port, find ready believers among his Portland admirers. Later still it is said that our old commodore, our commodore still, was made second in command of one of the most important United States unloading ports on the French coast.

Vernon F. West, our vice-commodore, marched away in the snow-covered column as a company commander under his superior club official. All I can say of West's career is that I am sure he has done his full duty wherever it may have led him. The censor has let little escape by which

to trace his activities.

Soon after the Reserves left Portland, Captain Rush, of the Boston Navy Yard, detailed Lieut. Lucien Snow to come to Portland and address the club members regarding their duty in relation to enlisting, recruits for the Navy or the Coast Defence Reserve and enrolling their boats in the latter organization. Lieut. Snow pleased everybody by the manly, straightforward way in which he explained his mission and accused great authorises a proper plained his mission and aroused great enthusiasm among the members at the well-attended meeting. The impres-sion gathered from his speech was that the Navy needed men and boats and needed them at once. Almost anyone who had ever handled a motor boat was urged to enlist and

Privately Owned Motor Boats Purchased by the Government

First List to Be Published Containing Names of Motor Boats Taken Into the Navy—The Purchase Prices—The Names of Their Former Owners and a List of the Boats Which Are to Be Offered for Sale by the Government

IN the lists printed on pages 36, 38, and 40, will be found a complete record of all motor boats and motor yachts which went into the service of our Navy Department during the war period. This is the first time that such a list has been published and is given to MoToR BoatinG at the special request of the Hon. Franklin D. Roosevelt, Assistant Secretary of the Navy.

The data which is printed is divided into four parts. Motor boats purchased outright by the Government; Motor boats loaned by their owners to the Government on a free lease basis; Motor boats chartered,

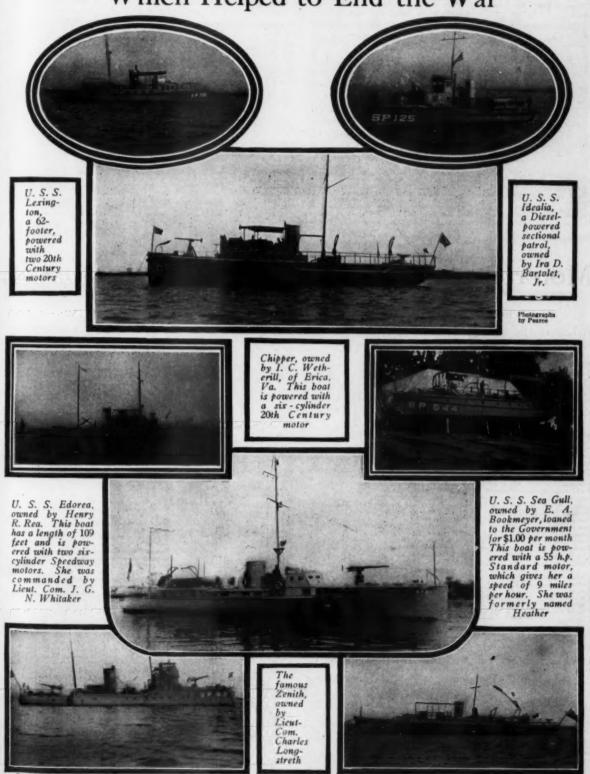
and Motor boats lost.

The lists include boats propelled by internal combustion motors only—they do not include steam yachts or steamers of any description.

A large majority of the boats purchased by the Government are to be offered for sale at once. Those which are to be sold are marked with a *.

Name of Boat No		Purchase h Price	Former Owner	Name of Boat	SP No.	Length	Purchase Price	Former Owner
*Actus	6 120 9 38	40,000.00	E. B. Dane, Boston, Mass.	*High Ball	. 947	45	1.00	Walter Jerome-Greene, Utica,
TAKDAC	37 7.0	23,000.00	E. B. Dane, Boston, Mass. H. V. Schieren, New York, N. Y. W. C. Drexel, Philadelphia, Pa. Dave H. Harris, New York, N.Y.	Hope Still	. 191	89	22,000.00	Irving E. Raymond, New York,
*Alice	8 56-9	6,000.00	F. Mayer, Baltimore, Md. J. Moore, Detroit, Mich. A. K. White, Philadelphia, Pa' Robt. F. Herrick, Boston, Mass.	Hopkins	. 3294	62-10	10,000.00	Hopkins Fish & Oyster Co., Nor.
*Althea	3 71-3	5,500.00 31,000.00	A. K. White, Philadelphia, Pa	*Howarda	. 144	69	13,000.00	folk, Va. H. S. Kerner, Boca Grande, Fla. T. C. Hurst, Norfolk, Va.
*Apache 72 *Arcturus 18	n 02-4	18,500.00 24,000.00	Martin J. Quinn, Greenwich,	*Hupa	. 650	62-7	12,000.00	T. C. Hurst, Norfolk, Va. Lewis T. Carev. Boston, Mass
Arroyo 19		1.00		*Ionita	. 388	55 49-10	6,000.00 3,162.00	Lewis T. Carey, Boston, Mass. R. A. Newman, Detroit, Mich. R. A. Long, Beaufort, S. C.
		9.012.00	Archer M. Huntinton, New York, N. Y.	*Jessamine. *Jos. F. Bellows	. 438	90-3 162	10,000.00	S. O. Richardson, Toledo, Ohio.
*Artmar 40		9,500.00	C. M. Dunbar, Providence, R. I. L. H. Dyer, 31 Nassau St., New York, N. Y. M. C. Kimball, New York, N. Y. Stuart Wyeth, New York, N. Y. A. B. Johnson, Norfolk, Va.	*J. Reynor & Sons	. 869	64	8,000.00	S. O. Richardson, Toledo, Ohio. Bellows & Squires, Ocean, Va. J. Reynor & Sons, Newport
Audwin 48	65 60 96-3	8,500.00	M. C. Kimball, New York, N. Y.	*Kangaroo	.1284	62	19,000.00 15,300.00	J. Reynor & Sons, Newport News, Va. Henry A. Morse, Boston, Mass. Louis Kann, Baltimore, Md. L. H. Freaz, Mismi, Fla. Richard B. Marks, Jacksonville, Fla.
*Aurore II 46 Bie & Schiott 287	1 64	14,500.00	A. B. Johnson, Norfolk, Va.	*Kanised Katherine K	. 220	55	2.000.00	L. H. Freas, Miami, Fla.
*Bivalve247	2 55	4,000.00		Katrich II		40	2,500.00	Richard B. Marks, Jacksonville,
*Calypso 62 Celeritas 66	12 54 15 60	3,000.00 15,000.00	nort. Conn. A. L. Mason, Westfield, N. J. R. B. Meyer, New York, N. Y.	*Killarney	. 415	146 65	85,432.00 3,500.00	F. E. Lewis, New York, N. Y. Jas. H. McGillan, Green Bay,
*Clarinda 18 *Cobra 62	55 98	25,000.00 14,000.00		Lagoda		85	9,000.00	
*Coco 11		5,500.00	W. J. Matheson, Cocoanut	*Lady Anne *Lomado	. 154	65	12,000 00 15,058.50	Geo. P. Walker, Savannah, Ga.
Commodore 142 Constance I I 63	5 63-3	19,000.00	Chas. M. Brooks, Boston, Mass. W. J. Matheson, Cocoanut Grove, Fla. Herbert N. Sears, Boston, Mass.	Lydia	62	40	8,000.00	N. W. Tilton, New York, N. Y. Geo. P. Walker, Savannah, Ga. F. T. Rogers, Providence, R. I. Mrs. Joseph Shattuck, New York, N. Y.
*Constance II 62	13 41 18 74	5,000.00 12,000.00	Joseph Gohm, Boston, Mass. Edward Morrell, Philadelphia,	Lydia III	. 676	51-5	5,513.50	Z. W. Bliss
*Coronet 19		11,500.00	Pa	*Lynx *Magnet	. 730	58 105	13,000.00	Nathaniel F. Ayer, Boston, Mass. Henry F. Lippitt, Providence, R. I.
*Cossack 66 *Coyote		21,000.00 3,000.00	Fred Berg, New York, N. Y. Galen L. Stone, Boston, Mass. Sylvester Sparling, Evanston, Ill.	*M. M. Davis		150	92,500.00	R. I. C. E. Davis Packing Co., Reed-
*Daiguiri	35 62	19,000.00 13,000.00	Osborne Howes, Brookline, Mass.	*Manito II		56	8,500.00	ville, Va.
*Daraga 97	3 77-6 8 135	25,000.00	Bellows & Squires, Ocran, Va.	*Marguerite	. 193	59	8,500.00	I. K. Heyward, Charleston, S. C. W. D. Sargeant, Bayonne, N. J.
*Dodger II 62 *Doris B IV 62	10 70-2	12,500.00 15,500.00	H. I. Pratt, New York, N. Y. I. C. Benz, Lynn, Mass.	Marie		70-3	10,000.00	W. D. Sargeant, Bayonne, N. J. Geo. W. Pinchon, New York, N. Y. R. B. McClowning, Wilmington,
*Engle 14	15 80	15,000.00 23,000.00	Nytvester Sparing, Evanston, III. Osborne Howes, Brookline, Mass. Stewart Davis, Newport, R. I. Bellows & Squires, Ocran, Va. H. I. Pratt, New York, N. Y. J. C. Benz, Lynn, Mass. Col. Wm. Heater, Brooklyn, N.Y. F. L. Budlong, Providence, R. I. E. P. Charlton, Fall River, Mass. L. O. White, Brockton, Mass. Lohn H. Hanan, Miami. Fla.	*Marija	. 413	46	6,000.00	R. B. McClowning, Wilmington, N. C.
*Edamena II	4 45	12,000.00 17,000.00	E. P. Charlton, Fall River, Mass.	*Mary Pope	. 291	51-6	7,500.00	Judge Robt. Bingham, Louisville,
Edithena	4 98-8	27,000.00	John H. Hanan, Miami, Fla. A. C. Sverson, Brooklyn, N. Y.	*Me Too	. 155	50 55	3,000.00	A. J. Shad, Jacksonville, Fla. Thos. H. Gill, Milwaukee, Wis.
*Edith M III 16 Efco246	96 59 05 40	5,500.00 German		Mikawe Miss Anne II	657	43	3,000.00	M. Corse, Jacksonville, Fla. Edward Morrell, Philadelphia,
*Ellen 28		10,000.00	more, Md. Edmund Randolph. Scripps Institute, La Jolia, Cal. C. B. Fox, New Orleans, La. Bellows & Squires, Ocran, Va.	*Mist		59	3,000.00	Pa.
*Ellen Browning 32 *Elmasada 16	34 23	3,000.00 12,000.00	Scripps Institute, La Jolia, Cal. C. B. Fox. New Orleans, La.	*Najelda	. 36	65 65	9,500.00	H. S. Beardsley, New York, N. Y.
*E. M. Froelich 38	0 138	25,000.00 24,101.42	Bellows & Squires, Ocran, Va.	Natoma	. 666	120	45,000.00	T. F. Barry, New Orleans, La. Richard F. Howe, Brooklyn, N. Y.
*Enterprise 75			Elsie C. Stewart, East Green- wich, R. I.	*Natoya Navajo II	. 396	43-5	3,000.00	R. M. Haddock, New York, N. V.
Elsie III 70	08 52 37 52	5,000.00 5,500.00	A. B. Houghton, Corning, N. Y. Chas. T. Choate, Jr., Boston,			67	18,000.00	Arthur P. Clapp, New York, N. Y. Geo. L. Batchelder, Medford,
Estelle 7		5,500.00	Mass. J. M. Hayden, Norfolk, Va.	*Needle		71	5,500.00	
Floyd Hurst23	19 50	3,500.00 8,000.00	J. M. Hayden, Norfolk, Va. John Clay, Chicago, Ill. T. C. Hurst, Norfolk, Va.	*Nerita *Niagara	. 3028	60-6 45	15,000.00 6,500.00	Caleva Bros., Norfolk, Va. H. M. Creel, Miami, Fla.
*G. H. Bradley 32 *G. H. McNeal 31	27 104	21,000.00	Oeran Humphries, Oeran, Va. McNeal Edwards Co., Reedville,	*Niagara *Nightingale Nigvana	. 523	45 42	7,000.00	
			Va.	*Ono	. 128	45	8,000.00	Marion S. Irwin, Martin. Wm. Reed Hill, Detroit, Mich. Knight & Porter, Key West, Fla.
*Glendoveer 21		8,500.00	Ernest Lee Jahnke, New Orleans, La.	Ora	726	85	11,000.00	S. W. Colton, Bryn Mawr, Pa.
*Grey Fox	52 50	10,150.00	Md.	Ostrich		35	1.00	Nathan Strauss, Jr., Brooklyn,
*Grey Hound 4	39-6	6,500.00	Mrs. Ida W. Seybert, Tampa, Fla.	Panama Patrol No. 1	. 40	67 40	4,000.00	Loving Swasen, Taunton, Mass.
Gurkha 0	00 61	12,000.00		Patrol No. 5	. 29	40	25,000.00	Nathan Strauss, Jr., Brooklyn, N. Y. Thos. L. Pinder, Key West, Fla. Loving Swasen, Taunton, Mass. R. C. Nickerson, East Brewster, Mass. Herman Oehlrichs, Newport, R.I. P. Hersen, Maries,
Helori 1	81 98	20,006.48	H. G. Kenney, Seattle, Wash. Dr. J. W. Hall, Trenton, N. J.	Patrol No. 6 Patrol No. 7	. 31	63	8,000.00 8,000.00	J. P. Hartt, Marion, Mass.
*Helena I 4	24 43 03 120	1,500.00 45,000.00	Eubank Tankard Co., Kilmar-	Patrol No. 10	. 85	60	21,500.00	J. P. Hartt, Marion, Mass. Greenport Basin & Construction Co., Greenport, Lone Island.
Helianthus 5		11,500.00	nock, Va. N. A. Herreshoff, Bristol, R. I.	*Polly	. 690	62	8,919.80	H. M. Merriman, Block Island,
*Hetman11		28,530.00	Greenport Basin & Construction Co., Greenport, N. Y.	Privateer	. 179	108	70,000.00	Co., Greenport, Long Island, H. M. Merriman, Block Island, N. Y. R. A. C. Smith, New York, N. Y. M. S. Bentham, New York, N. Y. Ernest Lee Jahnke, New Orleans
Herreshoff No.322 23			H. V. Morgan, Philadelphia, Pa.	*Psyche V *Quicksilver	. 281	51	10,000.00	Ernest Lee Jahnke, New Orleans
Hiawatha 1	83 89-6	33,115.00	A. W. Stanley, New Britain, Conn.			(Conti	inued on pa	

Delaware River and South Jersey Motor Boats Which Helped to End the War



Georgiana III, owned by E. T. Stotesbury, a 95-footer, powered with a 240 h.p. Diesel engine

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S. C. N. J. Tork,

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R.I.

Zipalong, owned by Messrs. Schwartz and Miller and powered with a 125 h.p. Standard motor

Privately Owned Motor Boats Purchased by the Government

(Continued from page 36)

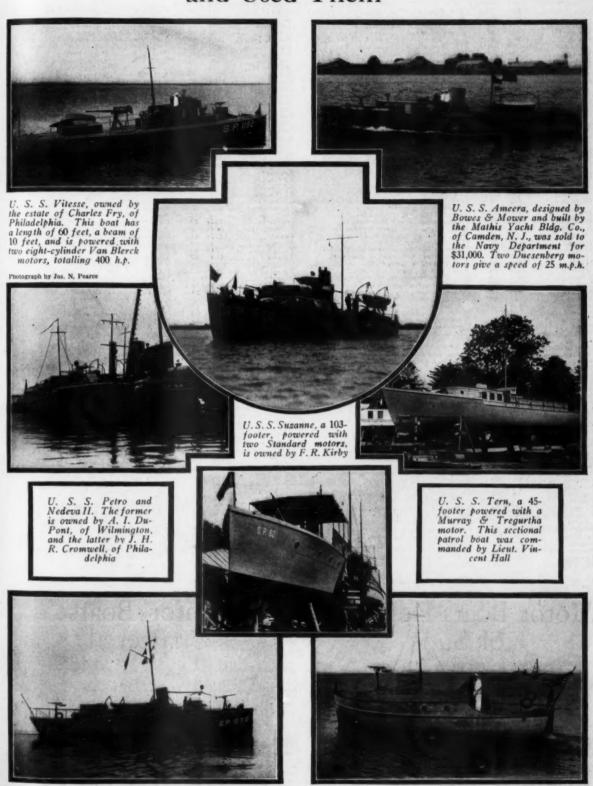
Name of Boat No.	Length	Purchase Price	Former Owner	Name of Boat	SP No.	Length	Purchase Price	Former Owner
Raeo 588 *Ranger 237	73 145	\$10,500.00 80,000.00	W. Schall, New York, N. Y. Thos. W. Slocum, Brooklyn,	Sturdy	82	75	\$11,650.00	J. A. Nickelson, Morris Heights,
			N. Y.	Susanne	411	76	25,500.00	J. J. Prindiville, Chicago, Ill.
*Raven III 103	50	15,000.00	Carl G. Fisher, Miami, Fla. Geo. G. Sheldon, Ridgefield,	*Sylvia Teaser		60	3,500.00 4,000.00	J. Alwood, Winter Haven, Fla. Geo. Roper & Bros., Norfolk, Va.
	-		Conn.	*Thrasher	546	45	5,000.00	Edgar Pierce
*Rondo 90 Rush 712	50 36-6	3,500.00	G. R. Ettles, Miami, Fla. N. H. White, Brookline, Mass.	*Tillamook	269	58	7,500.00	D. C. Whitney, Grosse Pointe Farms, Mich.
*Russ	60	28,530.00	Greenport Basin & Construction	*Traveler *Valeda	122	50-3	6,500.00	J. D. Meyers, Miami, Fla.
*Rutoma 78	68	8,000.00	Co., New York, N. Y.		592 3361	59-5 101	5,000.00	F. B. Richards, Cleveland, Ohio A. L. Dunn, Govanstown, Md.
*Rutoma 78	00	8,000.00	Conn.	*Verdi	979	75 42	1.00	M. J. Green, Utica, N. Y. Mrs. E. S. Wood, Norfolk, Va.
Sanda	36-2	2,500.00	H. C. Cushing, Jr., New York,	*Virginia	274	98	24,000.00	D. W. Smith, New York, N. Y.
Scandinavia3363	61-6	11,000.00	Bie & Schiott, Baltimore, Md.	*War Bug	361 1795	52 62-4	6,000.00	H. J. Defoe, Bay City, Mich. Felix Warburg, New York, N. Y.
Sea Gull 223	83	10,000.00	W. R. Tuckerman, Washington,	*Weepoose	450	59	7,548.10	Chas. S. Thorne, New York, N.Y
*Sea Hawk2365	62-4	19,000.00	Arthur Winslow, Boston, Mass.	*Wemootah	201	70	16,500.00	A. Gardiner Cooper, New York,
Sentinel 180 Sea Otter 781	64	22,000.00 4,500.00	W. G. Tibbitts. Hugh Willoughby, Newport, R.J.	*Whirlwind	221	117	20,000.00	Julius Fleishman, New York.
*Shad	43-8	4,000.00	Herbert C. Talbot, Boston, Mass.	*Whistler	784	50	12,000.00	Lawrence F. Percival, Boston,
(Shadow III) 102 *Shack	50 75	15,000.00	Carl G. Fisher, Indianapolis, Ind. Louis Herzog, New York, N. Y.	Wildcat	879	63-4	11,068.00	R. T. Potter.
*Shark 534 *Shrewsbury 70	98	25,000.00	U. H. McCarter, Rumson, N. J.	*Wild Goose I	562 891	33-6	7,500.00 1,525.00	Charles Harding, Boston, Mass. W. C. Winslow, Boston, Mass.
Shur 782 *Siwash 12	78-7 78	12,000.00	F. W. Pollard, Boston, Mass. C. A. Schieren, New York, N. Y.	Williams 18	498	90 75	1.00	Justus Ruperti, New York, N. Y.
Snapper2714	84	11,000.00	W. S. Webber, Norfolk, Va.	*Wilrose II *W. T. James	195	150	6,500.00	R. H. Meyer, Jacksonville, Fla. Taft Fish Co., Taft, Va.
*St. Sebastian 470 *Stinger 1252	50 80-5	3,500.00	J. W. Taylor, Marathon, Fla. Lieut. R. S. Russell, Boston,	*Yo-Yo	463	47	4,000.00	Dr. G. W. Van Benschoten, Pre-
*Stinger1252	80-0	40,000.00	Mass.	Zenda		44	1.00	vidence, R. I. Francis S. Eaton, Wiscasset, Me.
*Sparrow II3231	51	5,000.00	Sparrows Point Store Co., Balti- more, Md.	*Zig Zag Zumbrota	106	70	5,500.00 14,000.00	T. J. Bachman, Bradentown, Fla. Chas. Ringling, Evanston, Ill.

Motor Boats Loaned to the Navy Department for the War

A List of the Boats and Owners-The S. P. Numbers and the Length of the Boats Taken Over

A Dist of the	Doats	and Owners The Di Titus	moore and the	- Su	n or the Boats Taken Over
SP			SP		
Name of Boat No.	Length	Owner	Name of Boat No.	Length	Owner
Abalone 208	60	Arnold Schlaet, New York City.	Edith II 296	50	Carnot M. Ward, Whippany, N. J.
Absegami 371	75	Arnold Schlaet, New York City. A. K. White, Philadelphia, Pa.	Edorea 549	137-4	Henry Oliver Rea, Sewickley, Pa.
Acoma1228	60	T. D. Partridge, New York, N. Y.	Eleanor 677	58	A. B. Houghton, Corning, N. Y. Louis H. Eisenlohr, Philadelphia, Pa.
Albacore 751	50-8	Bryant H. Howard, San Diego, Cal.	Elf 81	58	Louis H. Eisenlohr, Philadelphia, Pa.
Albatross1003	39	Wm. H. Blood, Boston, Mass. Farley Hopkins and Dwight Wiman,	Elfin 965 Elithro 15	50-8 55	A. W. Gibbs, Philadelphia, Pa.
Alcalda 630	105	Farley Hopkins and Dwight Wiman, Mobile, Ala.	Ella1676	32	J. K. Robinson, New York, N. Y. R. B. Knox, Duluch, Minn.
Alert 511	75	T De Wice Cuyler Philadelphia Pa	Ellen1209	50	Ches P Curties Roston Mass
Anado 455	70	T. De Witt Cuyler, Philadelphia, Pa. J. A. Mollenhauer, Brooklyn, N. Y. E. A. Sims, Port Townsend, Wash.	Ensign 1051	68	Chas. P. Curties, Boston, Mass. Wm. L. DeMuth, et al., New York City. R. W. Stanley, Newton, Mass. M. F. Plant, New London, Comn.
Anado	127	E. A. Sims, Port Townsend, Wash.	Express IV 745	33-5	R. W. Stanley, Newton, Mass.
Arawan II 1	71-1	Chas. Longstreth, Philadelphia, Pa. Harry Fisher, San Diego, Cal.	Express IV 745	40	M. F. Plant, New London, Conn.
Arawan II 1 Arcilla 752	46	Harry Fisher, San Diego, Cal.	Fantana 71	72	N. B. Wolcott, Washington, D. C. H. B. Daniels, Acton, Mass.
Arval1045	75	Care of Tribune Co., Chicago, Ill.	Fearless 598	52-9 53-8	H. B. Daniels, Acton, Mass.
Atlantic1182	49-6	State of North Carolina, Raleigh.	Fern	74-7	Morehouse Stevens, Chicago, Ill.
Avenger	74 52	Philip Wunderle, Glenside, Pa. H. E. Baucher, Westhampton, Long Island. J. W. Kendrick, New York, N. Y.	*** **** **** **** ***** ****	14-1	Wm. V. Couchman & J. B. Moulton, Chicago
Babette II 484 Bagheera 963	66	I. W. Kendrick, New York, N. Y.	Folly1453		Cons. Commission, Md.
Barbara 704	40-8	Mrs. W. H. Hoffman, Barrington, R. I.	Frances II 503	45	D. Clarence, S. Steigerwald, Oak Lane, Pa. James H. R. Cromwell, Philadelphia, Pa.
Barracuda 845	60	R. W. McEwan, Whippany, N. J.	Georgiana III 83	95	James H. R. Cromwell, Philadelphia, Pa.
Barracuda 845 Beaumere II 444	62-6	W. H. Day, Larchmont, N. Y.	Geraldine1011	67	F. S. Fish, South Bend, Ind.
Beluga: 536	73	J. Henry Herring, New Bedford, Mass. Berwind Fuel Co., Duluth, Minn.	Get There 579	58-6 68-6	J. S. Bache, New York City.
Berwind1671	35	Berwind Fuel Co., Duluth, Minn.	Gladiola 184 Grayling 1259	35	Coburn Haskell, Thomasville, Ga.
Betty Jane8458 Betty M III 623	36	Percy Ballintine. H. P. Ballantyne, Detroit, Mich.	Grayling 280	50	E. E. Gray, Boston, Mass. Myer Rosenbush, Baltimore, Md. Edward German, Newport, R. I.
Betty M 111 623	60 72	E. P. Gavit, New York, N. Y.	Grayling 289 Green Dragon 742	60	Edward German, Newport, R. I.
Bluebird	35-10	North Carolina Fisheries, Morehead City.	Ciretchen 1181	54	Fish Commission of North Carolina.
Buck 1355		Conservation Commission of Maryland.	Halevon. 1558 Hamilton, Julia1460 Hayward, Eliza1414	40	Geo. G. Barnum, Jr., Duluth, Minn.
Buck	45	R. B. Whiteside, Duluth, Minn.	Hamilton, Julia1460	55	Conservation Commission of Nurfolk.
California 647	58	San Francisco Bar Pilots Assn., San Fran-	Hayward, Eliza1414	50	Conservation Commission of Norfolk.
		cisco, Cal. M. E. Brigham, Philadelphia, Pa.	Hazleton	40 52	George B. Markle, Hazleton, Pa. Edwin Thorne, New York City.
Caliph 272	60	M. E. Brigham, Philadelphia, Pa.	High Ball	31	N. B. Smithers, Cape May, N. J. James F. Porter, Chicago, III. J. S. Melcher, New York, N. Y. B. M. Baruch, New York, N. Y.
Calvert	44	Conservation Commission of Maryland. Wm. Sloan, Lock Haven, Norfolk, Va.	Hippocampus 654	56	James F. Porter, Chicago, Ill.
Caprice	45-10	R. Brackenburg, San Diego, Cal.	Hobo 783	72	J. S. Melcher, New York, N. Y.
Carolotta1785	42-5 43	Fisheries Commission, Norfolk, Va.	Hobcaw 252	52-6	B. M. Baruch, New York, N. Y.
Changicleer 663	37-5	H. S. Hutchinson, New Bedford, Mass.	Hoqua 142	71	
Charmian II 696	58	James E. Staton, Ir., South Dartmouth, Mass.	Hunch	35-2 75	W. M. Darby, Jr. Chicago, Ill
Chinook 644	40	J. G. Heaslet, Detroit, Mich. Estelle W. Hunt, Rahway, N. J.	Hyac	60	R. A. Alger, Detroit, Mich. W. M. Derby, Ir., Chicago, Ill. W. W. Vensil, Pittsburgh, Pa. Carl Reinschild, New York City. Ira D. Bertolet, Ir., Philadelphia, Pa. Richard Goldsmith, et al., Norfelk.
Chipper1049	57-9	Estelle W. Hunt, Rahway, N. J.	Idalia 270	68	Carl Reinschild, New York City.
Chipper 256		C. Wetherell, Erica, Va.	Idealia 125	75-8	Ira D. Bertolet, Jr., Philadelphia, Pa.
Cleo 232	50	State Game, Fish and Forestry Dept., Lan-	Idylesse 119	65	Richard Goldsmith, et al., Norfelk.
Clifton2080	55-3	State Game, Fish and Forestry Dept., Lan- sing, Mich. Virginia State Board of Fisheries, Norfolk, Va.	Inga	65	
Cometa		Saul Streiffer, Gulfport, Miss. P. H. Reid, Brooklyn, N. Y.	Itasca II 808	99-9 25	E. B. Hawkins, Duluth, Minn. F. H. Rawson, Chicago, Ill. Geo. A. Gumphert, Philadelphia, Pa.
Commander1247	61-2	P. H. Reid, Brooklyn, N. Y.	Iane II 1189	35	Geo A Gumphert Philadelphia Pa.
Courtenay P 899	52	John Day, Orange, N. J. E. F. Fallgren, Duluth, Minn.	James River 861	58	Fisherie a Commission of Virginia.
Cuyuna1674	30-6	E. F. Fallgren, Duluth, Minn.	Itty B. 952 Jane II 1188 James River. 861 Jay Dec III 692	45	R. H. Tabot, Irving Chapin, J. C. Wright, Lincoln, Neb.
Daisy Archer1283	69-6 45	Conservation Commission of Maryland.			Lincoln, Neb.
Dauntless1002 Dawn		Roy T. Barnes, Hartford, Conn. N. E. Donnelly, Brooklyn, N. Y. T. M. Fowler, New York City.	Jimetta 878	65	Clement Studebaker, Jr., South Bend, Ind.
Dean II 98		T. M. Fowler, New York City.	Jolly Roger1031	55-2 55-6	J. S. T. Allen, New York City. L. A. Lehmaier, New York City.
Desire 786	89	Clifford Ables, St. Louis, Mo.	Josephine	60	Frank S. Sample, New York City.
Dianthus 639	65	John P. Crozier, Upland, Pa.	Josephine 1243	82	Frank S. Sample, New York City. V. I. Wilson, New Orleans, La.
Dicky 231	46	G. N. Steele, Waukegan, Ill.	Josephine II 245	65	August Kling, Detroit, Mich.
Dixie	54	S. F. Houston, Philadelphia, Pa.	JOY 040	93	T. M. Jones and P. Kaufman, Newport, R. I
Donema, Jr 012	57 70	Louis Gerstley, Philadelphia, Pa.	Juniata 602	139-6	August Kling, Detroit, Mich. T. M. Jones and P. Kaufman, Newport, R. I Geo. W. Elkins, Philadelphia, Pa. C. C. Jones, Greenback, Va. Fisheries Commission of Virginia.
Doloms1066		Carnegie Institution, Washington, D. C. Alex W. Hornke, Grand Rapids, Mich.	Matherine 710	35	C. C. Jones, Greenback, Va.
Delphia 874	42	John A. Miller, Georgetown, S. C.	Katie 660 Karihou 200	48 66	Howard Spencer, Asheville, N. C.
Doris	35-2	and in the second of the	Kestrel 529	107	D. Herman Hosteller, New York City.
Doris B III 733	47	J. R. Jewett, Cambridge, Mass.	Kinghaher 76	60	R. P. Mathieson, Chicago, Ill.
Derethy1280	41	Conservation Commission of Norfolk	Kio-wa 711	35	R. P. Mathieson, Chicago, Ill. Frank R. Maxwell, Brookline, Mass.
Derethy	75	Walter Hennig, St. Louis, Mo. A. J. Drexel Paul, Philadelphia, Pa.	Kio-wa	55	F. E. Masland, Philadelphia, Pa.
Drusilla 372 DE clipse	417 107	A. J. Drexel Paul, Philadelphia, Pa.	Lady Betty 661	48	F. S. Washburn, Rye, N. Y. inued on page 40)
L clipse	417 183	F. W. Spencer, Savannah, Ga.		(Conf	inues on page 40)

Motor Boats Which Carried Guns and Used Them



U. S. S. Margo, or S. P. 870, is owned by J. H. Teller, of Philadelphia

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(Above) U. S. S. Little Aie, owned by J. P. Wetherill, of Philadelphia

U. S. S. High Ball, a 31-footer, one of the smallest patrol boats in service

Motor Boats Loaned to the Navy Department

(Continued from page 38)

	SP		(Commune)	om page 50)			
Name of Boat	No.	Length	Owner	Name of Boat	SP	T	0
					No.	Length	Owner
Lady Mary Lady Thorns	962	44	R. E. Niece and C. F. Smith, Stamford, Conn. R. C. Lamb, Elivabeth City, N. C. Dale B. Finer, Philadelphia, Pa. Boston Pilot Rel. Society. S. F. Rothschild, Bayshore, Long Island, N.Y. J. P. Wetherli, Jr., Philadelphia, Pa. Boston Pilot Rel. Society. Jas. Sprunt, Wilmington, N. C. W. C. Allen, Duluth, Minn. H. S. Vanderbilt, New York City. State Fish Commission, Morehead City, N. C. H. C. Whitney, Watertown, Mass. J. Teller, Philadelphia, Pa. W. D. Hatch, Jr., Neptune Island, N. Y. Ralph K. Trix, Detroit, Mich. O. L. Owens, West Peint, Va. L. K. Liggett, Boston, Mass. W. J. Matheson, Cocoanut Grove, Fla. Wm. F. Marty, Olney, Pa. J. S. Williams, Wilmington, N. C. Wm. H. Pattison, Washington, D. C. Arthur Curtis James, New York City. M. C. Dullan, New York City.	Regis II	1105	45 50	George A. Fischer, Baltimore, Md. H. Hornblower & Mayer, Boston, Mass. A. H. Woodward, Woodward, Ala. W. Harry Brown, Pittsburgh, Pa. J. H. Sturgis, Wachapreague, Va. Jack Merrill, Coronada, Cal. Wm. E. Dodge, Morris Heights, N. Y. D. G. Schmitz, Scattle, Wash. Charles E. Gantier, New York, N. Y.
		65-4	Dale B. Finer, Philadelphia, Pa.	Rickwood	507	70	A. H. Woodward, Woodward, Ala
Liberty III	.1229	103	Boston Pilot Rel. Society.	Rivalen	63	43	W. Harry Brown, Pittsburgh, Pa.
Liberty III Lillian II Little Aie	. 38	50	S. F. Rothschild, Bayshore, Long Island, N.Y.	Rivalen Robins, John B	1205	64	J. H. Sturgis, Wachapreague, Va.
Little Aie	. 60	56	J. P. Wetherll, Jr., Philadelphia, Pa.	MODEL	101	48	Jack Merrill, Coronada, Cal.
Louise	. 1230	104	Boston Pilot Rel. Society.	Sabalo	225	141	Wm. E. Dodge, Morris Heights, N. Y.
		40 30	Jas. Sprunt, Wilmington, N. C.	San Souci San Toy II	301	50	D. G. Schmitz, Seattle. Wash.
Magete Magistrate	143	63	H S. Vandarbilt, Nam Vork City	San Toy II	1012	70 77-6	Charles E. Gantier, New York, N. Y. E. L. Sanborn, Habans, Cuba. Harold W. Hower, Rome, N. Y. Charles Blum, New York, N. Y. Fred F. Field, Brockton, Mass. Rox T. Bookmeyer, Philadelphia, Pa. D. M. Ryerson, Milwaukee, Wis. J. S. Baker, Short Hills, N. J. Chase W. Cushman, Vernon, N. Y. Conservation Commission of Maryland. Mrs. G. W. Sortwell, Boston, Mass. H. W. D. Rudd, Boston, Mass. H. W. D. Rudd, Boston, Mass. Maryland State Fishery Force. Carl Tucker, New York, N. Y. Conservation Commission of Maryland. Eldon B. Keith, Brockton, Mass. Department of Commerce, Washington, D. Glebry Marsher, Norfolk, Va. State of North Carolina Watson Blair, Chicago, Ill. Jos. W. Marsh et al., Pittsburgh, Pa. Conservation Commission of Maryland. R. B. Roosevelt, New York City.
Margaret O	1764	35-3	State Fish Commission, Morehead City, N. C.	Satellite	1100	60-6	Harold W. Hower, Rome, N. Y.
Margaret O	. 614	49-6	H. C. Whitney, Watertown, Mass.	Savonara II	587	74	Charles Blum, New York, N. Y.
Margo	. 870	65	J. Teller, Philadelphia, Pa.	Sea Gull	713	36	Fred F. Field, Brockton, Mass.
Margin	.2119	41-6	W. D. Hatch, Jr., Neptune Island, N. Y.	Sea Guil	544	58-6	Rox T. Bookmeyer, Philadelphia, Pa.
Marguerite Il	. 892	40	Ralph K. Trix, Detroit, Mich.	Sea ag	500	50	D. M. Ryerson, Milwaukee, Wis.
Marold	737	100	L. K. Liegette Boston Moss	Sec W See	740	37 65	Char W. Cushman Varnage N. V.
Marnessa	787	50	W. I. Matheson, Cocoanut Grove, Fla.	Severn	140	40	Conservation Commission of Maryland
Marpessa. Marty Mary Louise	1145	40	Wm. F. Marty, Olney, Pa.	SevernShada	580	96	Mrs. G. W. Sortwell, Boston, Mass.
Mary Louise	356	47-10	J. S. Williams, Wilmington, N. C.			35	H. W. D. Rudd, Boston, Mass.
Maud. Mauna Loa	.1009	50	Wm. H. Pattison, Washington, D. C.	Skink Smith, Anna B	605	50	Robe, D. Longyear, Cambridge, Mass
Mauna Loa	. 28	55	Arthur Curtis James, New York City. B. C. Dunlap, New York City. Mrs. H. S. Bowen, New York City. A. J. Eddy, Chicago, Ill. S. E. Patterson, Duluth, Minn. C. J. Eisenlohr, Philadelphia, Pa Louis H. and Chas. J. Eisenlohr, Philadelphia, Pa.	Smith, Anna B	1458	70-6	Maryland State Fishery Force.
Mento	. 279		B. C. Dunlap, New York City.			62-4	Carl Tucker, New York, N. Y.
Minerva. Minnemac II	900	80 78	A T Eddy Chicago III	CD No. 549	2102	55	Conservation Commission of Maryland.
Minnenna II	1701	36	S. F. Parrerson, Dulurh, Minn.	Somerset	790	93	Danastment of Commerce Wathington D.
Minneopa Miramar	591	115	C. I. Eisenlohr, Philadelphia, Pa	SP No. 810	810	75	Henry Henke, Norfolk, Va.
Mirimar	672	76	Louis H. and Chas. I. Eisenlohr, Philadelphia,	SP No. 1182	1182	49-6	State of North Carolina
			Pa.	Speedway	407	54	Watson Blair, Chicago, Ill.
Mirna	. 1214	40-4	Horace K. Horner, Philadelphia, Pa.	Speedway. Starboard Unit		112	Jos. W. Marsh et al., Pittsburgh, Pa.
Miss Betsy	. 151	41	Mr. Ballentine, South Montrose, Pa. Mr. Ballentine, South Montrose, Pa. R. M. Ellery, U. S. Naval Reserve Force, H. F. McCormick, Chicago, Ill. C. H. Crane, New York City. Conservation Commission of Maryland.	St. Marys. Sunbeam III	1457	49	Conservation Commission of Maryland.
Miss Toledo Mona II Mome	.1711	60 40	H. F. McCornich Chicago III	Sunbeam III	251	52	R. B. Roosevelt, New York City.
Mome	40	57	C. H. Crane New York City	Swan	1437	78.4	Conservation Commission of Maryland. Jacob S. Disston, Tacony, Pa E. L. Beard, Flushing, Long Island, N. Y.
Murray	1438	85	Conservation Commission of Maryland.	Tamarak	561	82 80	F I Beard Flushing Long Island N V
Music	1288	41	Conservation Commission of Maryland.	Langier	4.69	62	
Momo	3289	40-8	A. S. Rascoe, Windsor, N. C.	Tango. Tanguinqui. Taniwha. Tech III. Tech Jr.	1712	32	Whitney Bros., Duluth, Minn. J. C. McCoy, New York City. New London Shipbuilding Co.
Mystery	. 428	74	Ralph Pulitzer, New York City.	Tanguinqui	126	63-6	J. C. McCoy, New York City.
		49	Ino. H. Hammond, Jr., Gloucester, Mass.	Taniwha	129	112	New London Shipbuilding Co.
Natick. Nautilus II. Nedeva II. Nelansau.	. 570	35	R. T. Crane, Jr., Chicago, Ill.	Tech III	1055	50	Coleman Du Pont, Wilmineton, Del. L. & T. Pettyman, Cambridge, Md. E. F. Hall, Atlantic City, N. J.
Nautilus II	. 500	66	E. E. Dickinson, Essex County, Conn.	Tech Jr	1761	20	L. & T. Pettyman, Cambridge, Md.
Nelsasan	610	51-5	Ino S. Kent Brocken Mass			53	E. F. Hall, Atlantic City, N. J.
Nemeria	343	41-9	Walter S. Suydam, Ir., Blue Point, N. Y	Terrier	1058	40 70	Paul Armstrong, Chicago, Ill. William Emmerich, New York City.
Nemesis Nepenthe	112	80	Jas. Deering, Miami, Fla.	Thrasher	546	45	Edgar Pierce.
Nettie Niagara	1436	41	Conservation Commission of Maryland.	Tocsam		40-5	Mrs. A. G. Vanderbilt, New York City.
Niagara	246	80-6	Gen. H. N. Creel, Miami, Fla.	Toxaway	743	52 37	E. G. Bene, Newport, R. I.
Nomad Normannia	756	36-7 42	Conservation Commission of Maryland. Conservation Commission of Maryland. A. S. Rascoe, Windsor, N. C. Ralph Pullitzer, New York City. Ino. H. Hammond, Ir., Gloncester, Mass. R. T. Crane, Jr., Chicago, Ill. E. E. Dickinson, Essex County, Conn. J. H. E. Cromwell, Washington, D. C. Jno. S. Kent, Brockton, Mass. Walter S. Suydam, Jr., Blue Point, N. Y. Jas. Deering, Miami, Fla. Conservation Commission of Maryland. Gen. H. N. Creel, Miami, Fla. F. M. Howe, San Diego, Cal. F. Thum, Pasadena, Cal.	Toxaway. Trilby.	673	37	William Emmerich, New York City. Edgar Pierce. Mrs. A. G. Vanderbilt, New York City. E. G. Bene, Newport, R. I. Gov. Milliken, Maine. Earl Pattion, Deluth, Minn. Edward W. Welsh, Philadelphia, Pa. Chas. Lane Poor, Jr., New York City. F. R. Richard. Claveland. Ohio.
Northamaton	670	38	F. Thum, Pasadena, Cal. Commission of Fisheries, Nosfolk. R. B. McEwan, Jr., New York City. H. Walter Blumenthal, New York City. D. P. Houser, St. Louin, Mo.	Triune	664	98	Edward W Walsh Philadelphia Pa
Northampton Niji	33	56	R. B. McEwan, Ir., New York City.	Uncas	680	60	Chas Lane Poor, Ir., New York City.
Ocoee	1208	68	H. Walter Blumenthal, New York City.	Valeda	502	59-5	F. B. Richard, Cleveland, Ohio.
Ojen	957	40	D. P. Houser, St. Louis, Mo.	Valiant	535	60	Henry M. Warren, Devon, Pa.
Onward	728	60	W. S. Forsyth, Rochester, N. Y.	Valiant Velocipede	1258	60	R. C. Smith, New York City.
Captev	. M22%	80	H. Walter Blumenthal, New York City. D. P. Houser, St. Louis, Mo. W. S. Forsyth, Rochester, N. Y. C. R. Runyon, Hollywood, Cal. E. B. Dickenson et al., New York City. Joel Fisher, New York City. Alex. Forbes, Milton, Mass. H. S. Vanderbilt, New York City. H. Gallatin Pell, New York City. B. F. Schwartz, Stamford, Conn. State of Maine. W. H. Saunders. Norfolk, Va.	Vencedor	609	90	F. B. Richard, Cleveland, Ohio. Henry M. Warren, Devon, Pa. R. C. Smith, New York City. H. H. Luedinghaus, St. Louis, Mo. Mrs. Sarah G. Silsbee, Boston, Mass.
Owaissa Patrol No. 2 Patrol No. 4 Patrol No. 8	400	79-5 40	Tool Fisher, New York City.	Venture	616	80	Mrs. barah G. Silsbee, Boston, Mass.
Patrol No. 4	8	40	Alex. Forhes, Milron, Mass.	Victor	1995	74	Geo. H. Larle, Ir., Philadelphia, Pa.
Patrol No. 8	56	72	H. S. Vanderbilt, New York City.	Vidotner	402	58-0 72	F D Cmish Philadelphia Pa
Patrol No. 11	1106	55	H. Gallatin Pell, New York City.	Vigilant Viking		42	Mrs. E. S. Wood, Norfolk, Va.
Patrina	67.5	60	B. F. Schwartz, Stamford, Conn.	Vincent	3246	49	Mrs. Saran U., Sussbee, Boston, Masil. Geo. H. Earle, Jr., Philadelphia, Pa. Stanley H. Freihofer, Philadelphia, Pa. E. B. Smith, Philadelphia, Pa. Mrs. E. S. Wood, Norfolk, Va. Norwich, Mich. W. M. Holland, Norfolk, Va. State of Maine. Lorenzo E. Anderson, St. Louis, Mo.
Pauline	658	42	State of Maine.	Virginia	1965	61	W. M. Helland, Norfolk, Va.
Pauline Pearl Peggy	1079	46 30	W. H. Saunders, Noriotk, Va.	Virginia	746	61-5	State of Maine.
Parlaceo	88	60	Nate of Maine, W. H. Saunders, Norfolk, Va. C. F. Deiser, Philadelphia, Pa. J. Phelps, Hackensack, N. J. E. E. Potter, Boston, Mass. Alfred I. Du Pont, Wilmington, Del.	Virginia Virginia Vision	744	45	Lorenzo E. Anderson, St. Louis, Mo.
Perfecto	596	29	E. E. Potter, Boston, Mass.	Vision	1114	67-6	Haywood Nelms, Houston, lexas.
Petrel	59	40	Alfred I. Du Pont, Wilmington, Del.	Vitesse	1192	60 53	Charles Fry, Philadelphia, Pa.
Pilgrim	1204	100	Beaufort Fish Scrap & Oil Co.	Wasp	1150	40	W S Partison Wisconson
Petrel	. 571	64-7	Allred I. Du Font, Wilmington, Del. Beaufort Fish Scrap & Oil Co. Commission of Fisheries, Norfolk. Frederick C. Hood, Waterrown, Mass. W. A. Long, Jr., New York City. Anderson & Jones, St. Louis, Mo. P. H. Du Pour, Merion, Pa.	Welcome	1175	40	Lorenzo E. Anderson, St. Louis, Mo. Haywood Nelma, Houston, Texas. Charles Fry, Philadelphia, Pa. John J. Martin, Boston, Mass. W. S. Pattison, Wisconson. R. H. Wilcex, Detroit, Mich. C. A. Sporl, New Orleans, La. O. G. Jennings, New York City. G. L. Carmegie, Fernandina, Fla.
Politesse	. 002	29	Frederick C. Hood, Watertown, Mass.	Wendy	448	55	C. A. Sporl, New Orleans, La.
Pollyanna	1048	34-10	W. A. Long, Jr., New York City.	Whippet	89	72	O. G. Jennings, New York City.
Pomander	364	43 59-6	P H Du Pont Marion Pa	Whippet	153	188	G. L. Carnegie, Fernandina, Fla.
Princilla	44	67	Frederick S. Fisher, White Plains, N. Y.	Wiwoka	230	That .	Jos. V. Gallagher, New York City. Ackerman & Rowland, New York City G. W. Robinson.
Priscilla Quest	171	00	Daniel Bacon, New York City.	YankYarrow	908	60	Ackerman & Rowland, New York City
Qui Vive	1004	45	Anderson & Jones, St. Louis, Mo. P. H. DuPont, Merion, Pa. Frederick S. Fisher, White Plains, N. Y. Daniel Bacon, New York City, Houston Barnard, Rochester, N. Y. Edward C. Burghard, New York City.	Yarrow	1010	65	G. W. Robinson.
Raazoo	508	62	Edward C. Burghard, New York City.	Zenith	61	73-3 54	Chas Claste & Co. Galwatton Toron
Raboco	310	65	Edward C. Burghard, New York City. Harry C. Good, Moline, Ill. C. W. Fabyan, Cambridge, Mass. Henry L. Galpin, New York City.	Zillah	3	78	Chas. Longstreet, Philadelphia, Pa. Chas. Clarke & Co., Galveston, Texas. E. W. Clark, Philadelphia, Pa.
Recoon	2000	50	Henry L. Galnin, New York City.	mhainag			and the same of th
meetl, Laura		0.0	menty at despite, they total dity.				

Motor Boats Destroyed or Sunk

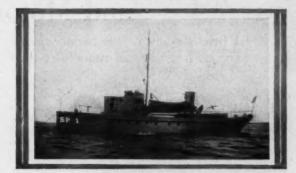
Name of Boat	SP No.	Length	Cost	Former Owner
Bonita	540	45	\$4,400.00	Robert Windsor, Boston, Mass.
Cero	1189	40		R. C. McCorkle, New York City.
Chingachgook	35	60	19,500.00	T. W. Brigham, Greenport, Long Island, N. Y.
Elizabeth	972	53-1	8,000.00	Emma Davis Powell, Norfolk, Va.
Elizabeth	1092	55	,	Col. W. L. Moody, Galveston, Texas.
Gy pay	. 85	61	9,000.00	Robert F. Herrick, Boston, Mass.
Nemes	424	50-2	4,700.00	I. C. Noblit, Fort Myers, Fla.
Seven		20	1,500.00	D. R. Shackford, Norfolk, Va.
Simplicity	. 96	58-9	5,250.00	A. S. Korter, N. Y. C.
Tarantula		128-9	78,000.00	William K. Vanderbilt, N.Y. C.
Wyandance	359	60-11	1.00	M. S. Burrill, Jericho, Long Island.
Yard No. 210	907	00-34		Stanley Mortimer, New York

Motor Boats Chartered

Name of Boat No		Rate per Month	Owner
Anderson, M 120		70	W. B. Anderson, Oyster, Va.
Anna Belle120		70	W. J. Matthews, Chincoteague, Va-
Amagansett 69		5,000	E. Benson Dennis, Cape Charles, Va.
Cosy 55	6 50	70	Harry N. Collins, Franklin City, Va.
Dennis, E. Benson. 79	1 110	5,000	Dennis Fish & Oil Co., Cape Charles,
Emma122	3 42	70	Wm. T. Bowden, Chincoteague, Va.
Falcon	85	300	Alki Point Transportation Co.
Hazel120		70	W. I. Matthews, Chincoteague, Va.
Isle of Surrey 180		300	W. P. Warren, Rushmore, Va.
Luce Bros 84			Dennis Fish & Oil Co., Cape Charles,
Mason, Chas. B 122	5 45	70	Va. Ino. K. Colona, Chincoteague, Va.
Pirate 22		50	Ashley Halsey, Charleston, S. C.
Sequoyah 42		-	A. T. Lavalette, Hampton, Va.
Verna & Esther 118	7 45	50	Ensign F. K. Williams, Provinc
verna a getnet 110		-	town, Mass.
Wanderer 244	0 36-6	10	F. R. Barnette, Norfolk, Va.

Motor Boats Cleared for Action Which Have Been Returned to Their Owners



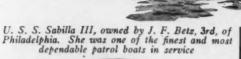


U. S. S. Dohema, Jr., a 57-footer, owned by Louis Gerst-ley, Jr., of Philadelphia, Pa.

D.C.

Vx. Va. Arawan II, Lieut.-Com. Long-streth's 71-footer powered with two Murray & Tregurtha motors

Photograph by Jos. N. Pearce







Kuwana II, owned by F. E. Masland, of Philadelphia



U. S. S. Elfin, owned by Alfred W. Gibbs, of Philadelphia. This boat is a 50-footer and is powered with a four-cylinder Standard motor



U. S. S. Juniata, owned by Geo. W. Elkins, of Philadel-phia. This boat was in command of Lieut. Geo. E. Lawrence



U. S. S. Frances II. Dr. C. S. Steigerwalt, is the proud owner. He was in command of her with the rating of ensign

U. S. S. Nirvana II, owned by J. Hartley Merrick, and powered with a 70 h.p. Sterling engine

War Service Record of American Yachtsmen and Motor Boatmen

A Brief Resume of the Service Seen by Many Officers and Men Who Received Their First Love of the Water Aboard Small Motor Boats in Peace Times

Ensign A. R. Cochran

YE ho for a good stiff breeze and a white sea," says Ensign A. R. Cochran, a member of the Alpha Boat Club of Chester, Pa., who expects to be released from the Naval service shortly, and intends making a cruise on his sloop

Dorothy.

Ensign Cochran enlisted in the Naval Resrve Force in Chester, April 3, 1917, but was not called into service until September 25, 1917. His first station was at Cape May, N. J., for preliminary instruction, receiving there the fundamentals. He had been enrolled as coxswain and while at Cape May took an examination to confirm that rating. On January 4, 1918, he was transferred with about 103 others to the Fourth Naval District Section Base at Lewes, Del. The Section Base was in an old United States Marine Hospital and was a pretty sad place. When the men from Cape May arrived the thermometer was down around the zero point and there was not a drop of running water in the place. The best light they could get was given by smoky oil lamps.

Soon after they arrived a division was formed to do duty as naval port guards. Certain classes of merchant vessels entering Delaware Bay had to have a guard consisting of a petty officer and two men. Coxswain Cochran was fortunate enough to be among these guards and had several interesting trips to Phila-The guards had to watch the ship from the time she entered the bay until she passed out again. Every one liked that duty for, besides relieving the monotony of life at the base, it gave them a chance to get home for a few hours. Mrs. Cochran had been urging her husband to take the examination for ensign, so during most of his spare time he studied navi-

gation, seamanship, ordnance, etc.

He was recommended very highly by the commanding officer and took the examination April 2, 1918, at the Law School of the University of Pennsylvania. It was some time before he heard anything from it, but finally word that he had passed came and he was ordered to the Philadelphia Navy Yard to take the physical examination. He passed this and received his commission the same day, May 8.

Ensign Cochran was detached from Lewes and detailed for duty in the office of naval operations in the Navy Department in Washington. There he was placed under the director of naval communications, in the code and signal section, where various methods of signalling are devised and published, both visual and radio, codes, cyphers, and radio calls. On November 27 he was sent to the naval hospital in Washington with a bad case of influenza and pneumonia. They told him that his life was saved only by the use of a wonderful serum which they gave him and which had recently been developed at that hospital. On December 21 he was discharged from the hospital and granted thirty days' sick leave. Shortly after he returns to duty, January 20, he expects to receive his discharge.

Coxswain G. G. Vigouioux

BY reason of his previous yachting experience Gustave G. Vigouroux, of 14 Neptune Ave., New Rochelle, N. Y., a member of the Huguenot Yacht Club of that place, was given a coxswain's rating when he enlisted in the Naval Re-Y reason of his previous yachting experience Gustave G. serve Force shortly after America entered the war. The first four months after his enlistment were spent in the Fifty-second St. Armory, Brooklyn, in training for duty. Then he was transferred to the Brooklyn Navy Yard and detailed in the public works department for building construction work about the yard. This unexpected change was the result of Coxswain Vigouroux having received the training of an architect in civil He had graduated in this course from Columbia University. Four more months were spent at this service and then he was detached but sent to another detail along similar lines, but more important at the Bush Terminal section of Brooklyn for the erection of naval warehouses.

When he had been at this work for three months another call was sent out for his services and he was transferred to the

Pelham Bay Training Station where he passed the remaining period of his enlistment. Here he underwent a month's training to get back in form and progressed on and through the Petty Officer's School. The end of the war came just as he was about to finish the officer's training course and secure a com-

Chief Machinist's Mate Geo. T. Pullen

ATROLLING the English Channel from Start Point to Land's End and up the Cornish Coast as far as the British Channel, always from twenty to 250 miles off the coast, has been the service that George T. Pullen, Chief Machinist's Mate on Sectional Patrol No. 87. Chief Petty Officer Pullen enlisted in the Naval Reserve Force August 16, 1917, and shortly thereafter was sent across the Atlantic, his final destination and station being Base No. 27, Plymouth, Eng. He has been in foreign waters eight months and his squadron has two German U-boats to its credit. He is a member of the Ketewonoke Yacht Club of Huntington, L. I.

Ensign H. R. Wheeler

OUR months after he had been called into active duty as a machinist's mate, first class, Hobart R. Wheeler, of New Rochelle, N. Y., received his commission as ensign in the Naval Reserve Force. Young Wheeler was but twenty-one years of age when he enlisted in the Reserves April 15, 1917. He was called into active service May 18, 1917, at Section One, Third Naval District, New Haven, Conn. He was commissioned ensign September 20 of the same year and placed in charge of the repair department at Section Base One, From the time he was called into service until he received his commission he was in charge of the Armed Guard training at New Haven. Ensign Wheeler graduated as a Bachelor of Philosophy in the class of 1917 of the Sheffield Scientific School of Yale. He is a member of the Phi Sigma Kappa and the Hugenot Yacht Club of New Rochelle.

J. Lincoln Crawford

HE Coast Guards attracted J. Lincoln Crawford, Norwich, Conn., a member of the Chelsea Boat Club of Norwich, and he joined that service in New Haven in May, 1918, later being transferred to New York to the Second Company, along with ten others, to fill up the company, which is the oldest in the division. This command was located in the Twentysecond Armory in 168 St., the commanding officer being Captain

Strikty, who was popular with his men.

The men spent part of their time at the armory and part of their time at Sandy Hook and later were located at the Battery in the Barge Office. The object of that branch of the service was to guard the ammunition and explosives while they were being loaded into vessels. When these vessels came in a guard was sent aboard in charge of two petty officers and they stayed there while she was being loaded if it took a day or two or a week or two. The vessels were also guarded by small boats on the outside with a tugboat in charge day and night. There were seven companies of Coast Guards in Mr. Crawford's division, all of whom had charge of the water front work in New York Harbor and along the Jersey coast. After the explosion at Morgan the Second Company was transferred to Perth Amboy where it did guard duty during the cleaning up.

E. L. Merritt, Jr.

OST of the time Edward L. Merritt, Jr., of Philadelphia, A DST of the time Edward L. Merritt, Jr., of Philadelphia, has been in the Navy has been spent in very active ser-This member of the Malta Boat Club and the Lorallette, New Jersey Yacht Club enlisted in the Naval Reserve Force in April, 1917, when only eighteen years of age. He was trained at Wissohickon Barracks for three months and on Thanksgiving Day 1917 was transferred to the U. S. S. Nokomis, Sectional Patrol No. 609. He left the United States the second week of December, 1917, for Bermuda and on Janu-(Continued on page 44)

Privately Owned Craft Which Motor Boatmen Turned Over to the Navy Department



Charmian II, a former Chesapeake Bay racer, enrolled in the Second Naval District. This boat was in command of Ensign Otes Cook Stanton

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S. P. 2373, assigned to the Third Naval District. This boat was purchased by the Government for \$40,534 from her former owner, H V. Morgan, of Philadelphia

Photograph by Edwin Levick

Fabius, a winner
of the New York
to Albany and Return Race of a few
years ago. This
boat is owned by
F. J. Minkel, of
the New York
Motor Boat Club

Photograph by M. Rosenfeld



Chanticler, S P 663, owned by H. S. Hutchinson, of New Bedford, Mass. This boat is a 37-footer, powered with a Standard engine



Sea Wolf III, designed by Kromhols, is owned by Le-Roy Moody, of Bayside, L. I. Her power plant consists of a six-cylinder Niagara motor

War Service Record of American Yachtsmen and Motor Boatmen

(Continued from page 42)

ary, 3, 1918, started for the Azores, arriving there January 25. He had a very hard voyage and his boat had been reported lost. From the Azores he went to Brest and has spent the remainder of his time in and out of French ports.

After serving on the Nokomis for eight months doing convoy and patrol duty, going 1,000 miles to sea, his eyes gave out on him and he was transferred to Naval Base No. 20, as engineer of the motor boat for the Commandant of the District at Rochefort Sr Mer.

Ensign J. G. Alley

HE Larchmont Yacht Club has a patriotic representative in the Navy in the person of Ensign John G. Alley, of Larchmont, who enlisted in the Navy in April, 1917, and was assigned to patrol duty at the net off the Connecticut River. He served there on board the Uncas, a fast 60-footer, and was rated as coxswain.

He passed his examination for a commission at Pelham Bay Training Station and in February, 1918, was sent to Annapolis for the three months' course. Upon its completion he was ordered to the North Atlantic Fleet on board the Alabama. In September he was ordered to Boston, where he was selected to organize and command the Naval Training Unit at Harvard University, where he still was when the armistice was signed.

Lieut, Godfrey L. Cabot

UE to his experience in yachting for many years while a member of the Manchester Yacht Club, of Manchester, Conn., Lieutenant Godfrey L. Cabot was enrolled in the Naval Reserve Force with the rank of lieutenant on March 20, 1917. He was called to service almost immediately and made commandant of the Marblehead Aviation Camp April 16, and continued as commander until August 15, 1917, when the camp was closed. Before this time, beginning April 6, Lieutenant Cabot, with the permission of Captain A. H. Robertson, Chief of Staff for the First Naval District, began patrolling Massachusetts Bay, flying in his own seaplane "Lark," which patrol duty he continued until the end of October.

For over a year Lieutenant Cabot has been trying to develop the art of taking up burdens in flight and beginning last April he has been taking up larger and larger burdens, with a gradual increase, until on October 3, 1918, he took up 155 pounds in flight with his Burgess Dunne pusher triplane driven by a 150 h.p. Hispano-Suiza motor. Lieutenant Cabot has been aviation aide for the First Naval District throughout the war.

Lieut. W. D. Kipp

HE nautical training that he received at the Naval Cadet School of the Massachusetts Institute of Technology stood Lieut. Walter D. Kipp, of Newport, Vt., in good stead for he has won steady promotion since entering the Naval Reserve Force, in April, 1917. After being in the Navy but a few months he was chosen with eleven others out of 600 applicants to receive the officer's training course at Tech.

Ensign Kipp left New London, Conn., in February, 1918, in command of Sectional Patrol No. 256 and after a short but rough trip along with other small vessels they made Bermuda. Here they put in a month maneuvering at target practice and then left for the Azores. This trip was uneventful. These boats were all 110-foot chasers with the exception of a mother ship with supplies and fuel. From the Azores they proceeded to Gibraltar where they overhauled. Near here, while maneuvering they forced a submarine to intern in Spain. From Gibraltar the fleet went to Malta and finally to the United States Naval Base No. 25, in the Adriatic.

While in Bermuda Ensign Kipp was made Commander of the First Division and led the fleet on the whole voyage. fleet of submarine chasers did exceptionally fine work in the Adriatic and finally cleared that sea of the U-boats. They participated in the naval engagement at Durazzo, destroying mines and bagging two underseas craft in the engagement. The fleet got many submarines and captured one with its entire After a few months of patrol duty and plenty of "ash crew. After a few months of patrol duty and pienty can" dropping the subs almost wholly disappeared. Kipp was promoted to lieutenant, junior grade and had been recommended for lieutenant (senior). He is at present in the radio office at Base No. 25, but expects to soon return to America.

Ensign G. J. Sokel

HE Pay Corps of the Navy finally claimed George J. Sokel, of the Meriden Motor Boat Club of Meriden, Conn., who enlisted in the Navy as a yeoman, third class, in July, 1917. He was called into service in August of the same year and was sent to Newport, R. I., for training. After a short period there he was sent to New London, Conn., where he remained until December, 1917, when he was transferred to Philadelphia.

In January, 1918, he was sent to Scotland where he was at work on mines, when he was promoted to chief yeoman and remained in Scotland and in Scottish waters for the balance of the year, receiving his commission as assistant paymaster with rank of ensign in November, 1918. Ensign Sokel intends to remain in Scotland for several months.

Gunner B. F. Cogswell

FOR seventeen years in the regular Navy, Gunner B. F. Cogswell has been ready to fight and his only regret is that during the recent conflict he was unable to get into real action with the Huns. Shortly after war was declared Gunner Cogswell was detailed by the Navy Department to take charge of armed guards on various merchant craft. He was almost constantly at sea travelling to Europe and in coastwise service but, as he says himself, "The twenty odd naval men ever with me in these vessels had no action save a constant vigilance, a daily training toward fitness as men o' war's men and merchant marine sailors and by so doing won themselves promotion in the Navy and the hearty appreciation of the officers and owners of each ship we were in.

'Frequently the vessels were short-handed," he states, "but were not handicapped because the naval men with me covered both billets, and on January 3 one of our armed guard steered our vessel from lower New York Harbor to her berth while others performed divers seamen duty until we were snug alongside of the dock."

Asst. Naval Constructor B. F. Dobson

AS a yacht designer with William H. Hand, Jr., of New Bedford, Mass., B. F. Dobson had already made quite a reputation as a boat constructor so it was only natural that when he enlisted in the Navy April 17, 1917, that he should be assigned to the Bureau of Construction and Repair. Mr. Dobson has been commissioned as Assistant Naval Constructor and has been Repair Officer of the Second Naval District practically since the time of his enlistment. In that capacity he has had charge of the conversion, alterations and repair work on all vessels taken over by the Navy Department in his district. He is now on the Board of Appraisal to return leased vessels to their owners and upon the completion of that duty expects to be back in the yachting game with his former employer. Constructor Dobson is a member of the New Bedford Yacht Club.

John A. Nettleton

HE lure of being a member of the corps that is "first to fight" proved too strong for Private John A. Nettleton, of Stratford, Conn., who enlisted in the Marine Corps, July 17, 1918, being the only one out of thirty-four applicants who passed the examination. He left for Paris Island August 1, and during his training period received the marksmanship medal. He sailed from Hoboken about October 20, and is a member of Company B, Eighth Separate Battalion, United States Expeditionary Force of the United States Marine Corps.

Ensign J. P. Thomas

S commander of S. P. No. 270, Ensign John Pickering Thomas, Jr., a member and director of the Harpswell Yacht Club, of Germantown, Pa., took his little 110-foot craft overseas. Ensign Thomas enlisted in the Naval Reserve Force in November, 1917, as boatswain's mate, first class, and for about four months was on duty on the coast patrol boat Endion off the Maine coast.

In March, 1918, he was ordered to camp at Hingham, Mass., and there received his commission as ensign. He was then ordered to the command of the Sectional Patrol No. 270, serving first with Portland, Me., as his base and afterward at New

(Continued on page 46)

These Naval Men Were All Yachtsmen First



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Chief Boatswain's Mate E. R. Buck, U. S. N. R. F., of St. Michaels, Md., owner of Wanderer



Ensign Joseph H. Mundy made the trip across aboard Sec-tional Patrol No. 92



Ensign Andrew J. McElhinny, a member of the New York Motor Boat Club



Chief Machinist's Mate George T. Put-len, of Huntington, L. I.





Lieut. S. H. H. Par-sons, a member of the Albany Yacht Club, Albany, N. Y.



Chief Boatswain's Mate Richard Story, Commanding Officer of Minerva



Seaman H. M. Brew-ster, son of Commo-dore Brewster of Bay Shore, L. I.

Boatswain's Mate Harold Vaughan of the Naval Reserve Deep Sea Diving Unit



Ensign William F. Lally, U. S. P. S., still in active service in foreign waters



Howard Blauvelt, U. S. N. R. F., a member of of the Ny-ack Boat Club



War Service Record of American Yachtsmen and Motor Boatmen

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London, Conn.; then at Norfolk and finally off Cape Hatteras. In September, 1918, he took her across, touching at Lisbon, Portugal. While he was there the armistice was signed and he took the No. 270 to Gibraltar to await orders. He was specially commended by his superior officers for his seamanship. He returned to America and expects to again resume his profession of architecture shortly.

Boatswain's Mate L. J. Williams

FOOTBALL player as well as a yachtsman and a man-o-war's man is Leo J. Williams, of Chester, Penn., who enlisted in Philadelphia in the Navy, October 7, 1917. He sent to the Norfolk Navy Yard and while there played halfback on the station team at St. Helena. Blodgett, of the All-American, from Annapolis, was fullback on this team. This was a great team and defeated practically all of the teams from the fleet stationed at Hampton Roads at that time. football season Mr. Williams was ordered to the Algiers Naval Station at New Orleans. There he joined the Gunboat Petrel which had been on the Central American Patrol and was out-

From New Orleans he went on the Petrel to Key West where the gunboat was engaged in experimental work and later they went to Hayti. Thence to Cuba and finally to San Juan, Porto Rico, where the American sailors took over the Dutch ships, March 21, 1918. Young Williams was transferred to the Holland-American liner Goestdyjk and left San Juan for Montevideo, Uruguay, a trip of twenty-one days. The cargo was unloaded there and the vessel proceeded to Rio De Janiero where she loaded manganese for Baltimore, making the return trip in twenty-three days, including a stop at St. Thomas, West Indies. From Baltimore the ship proceeded to Norfolk and then back to Rio again in twenty-three days, where she again loaded manganese and made the up voyage in another twenty-Upon the completion of this trip Mr. Williams was transferred to the League Island Navy Yard and mustered out of the service a boatswain's mate, second class.

Coxswain H. E. Gerber

MATEUR yachting experience aided Henry E. Gerber, Providence, R. I., in securing the rating of coxswain when he entered the Navy, July 29, 1918. At first he was stationed at Newport, R. I., where, after a short period of training, he was sent to the Brooklyn Navy Yard for further assignment. In September he was ordered to Ellis Island and was assigned to a transport, but before he could report on board he was stricken with influenza and the vessel sailed without him.

Having quite recovered in the latter part of November he was ordered to the U. S. S. Federal, a cargo carrier, and sailed on that vessel for France December 1 with a cargo of horses and supplies. He is the son of Herman Gerber, of Providence.

Ensign G. B. Nelson

SSISTANT paymaster George B. Nelson of the Naval Reserve Force was commissioned an ensign in the Pay Corps of the Navy, March 29, 1917. In the early days of the war when there was much chaos in the various naval districts, owing to the great burden of work and the unprecedented responsibility placed on subordinate and junior officers, Ensign Nelson did splendid service in assisting in the organization of the Supply Depot of the Third Naval District. He was on this work for nine months acting as head of the Issuing Division. This division had charge of the outfitting and supply of all vessels and bases in the district. Later he was made Depot Superintendent of the Supply Depot, of the Third Naval District and on September 6, 1918, was assigned to duty at the Central District Salvage Depot as Supply Officer in which assignment he still remains.

Electrician S. J. Donaldson

S a member of the crew of the U. S. S. Corsair, formerly the private yacht of J. Pierpont Morgan, S. J. Donaldson, New York City, the son of E. Donaldson, vice-president of the L. A. Thompson Scenic Railway Co., of 291 Broadway, has been commended for special and important services rendered several times.

Young Donaldson enlisted in the Naval Reserve Force in May, 1917, as a seaman, first class, and was at once assigned to the Corsair. He left the United States in June, 1917, as one of the convoying vessels for the second flotilla of transports to leave for France. Since that time his ship has been performing convoy and patrol duty out of French ports until the armistice was signed. Later the Corsair visited England. In June, 1918, Seaman Donaldson was promoted to electrician, second class. During his service he has had some thrilling experience and narrow escapes, one of them being when his ship was nearly lost in a hurricane in the Bay of Biscay in December, 1917.

Ensign Adrian Iselin II

MERICA'S most enthusiastic yachtsmen were in many instances well prepared to assume executive duties in the Naval Reserve Force when this country entered the World War and Adrian Iselin II, of Roslyn, L. I., well-known amateur yachtsman, was among these. It was no surprise, therefore, to his fellow members of the Port Washington Yacht Club when Ensign Iselin enlisted at the very beginning of the war. He at once received the rating of chief boatswain's mate and was assigned to duty on one of the transports. Here he received real training as a chief petty officer and with his previous experience he was able to qualify easily for the commission of ensign, which he received a bit later.

Ensign Iselin has been in command of the U. S. S. Privateer. Sectional Patrol No. 179, which has its base at the Naval Air

Station, Rockaway, L. I.

Ensign Langley Hawthorn

SSIGNED to the transport service Ensign Langley Hawthorn has been through many exciting adventures with the pirate U-boats and on a number of occasions has had narrow escapes from being immersed in the briny deep, much deeper than he cares to be.

He enlisted in the Naval Reserve Force in May, 1917, and was ordered to active duty in July, 1917. At the training camp at Bensonhurst, L. I., he received his preliminary instruction in the essentials of sailoring and was then sent to the officers' training camp at Pelham Bay and graduated from there as an ensign. Following his commissioning he was assigned to the transport service and has been making regular trips overseas ever since.

Daniel L. Brown

REJECTED by both the Navy and the Army, Daniel L. Brown, of Norwich, Conn., has put in his time in the merchant marine, entering that service in June, 1917, and remaining until December, 1918. Part of the time he was an instructor in the officers' training school for the merchant marine service and part as a junior officer on an Army freight transport in trans-Atlantic service.

He took part in a hour's running battle with a submarine on the west bound trip of his ship, September 19, 1918, 500 miles E x S of New York. His vessel was ashore on the Spanish coast near Valentia in September and he expected he would be interned but the ship finally got off within the twenty-

four hour limit.

Ensign George G. Dominick

BECAUSE of his experience as an amateur yachtsman George G. Dominick, of New York, a member of the Stamford Yacht Club, of Stamford, Conn., was commissioned an ensign in the Naval Reserve Force when he enrolled in that organization on June 8, 1917. He had a short course of training at the Columbia University Officers' Training School and was then transferred to Base No. 6, Bensonhurst, L. I., to train a crew for a submarine chaser. In September he was placed in command of Sectional Patrol No. 21, which, with the Sectional Patrol No. 6 and the Sectional Patrol No. 19, were the first 110-footers to go into commission in active duty in that part of the coast. They were immediately formed into a tactical group and sent to New London, Conn., where they were put on experimental work with the development of listening devices. These three ships form the nucleus around which the very remarkable development of the anti-submarine work has been constructed.

(Continued on page 48)

Motor Boatmen Who Have Made Good in the Navy



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Ensign George B. Nelson, assigned at Central District Salvage Depot



U. S. Coast Guard Fred H. Twack, of Genesee Dinghy Club, Rochester, N. Y.



Machinist Ralph B. Boisset, U. S. S. Von Steuben. Member of the Colonial Yacht Club



Electricium, First Class, S. J. Don-21ds on has per-formed convoy and patrol duty



Lieut. George Gardner Fry, assigned to Sec-tion Base No. 6



Charles Stone, of Seattle, Wash. Enlisted in the U.S. N. R. F.



Lieut. Roland C. Nick-erson, who gave his life for his country



Lient. John Black, Jr., of Dorchester, Mass., assigned to patrol duty in the Mediterra-





Chief Machinist's Mate J. Denver Mc-Kay, in charge of en-gine-room on Sub Chaser 355



C. P. O. Russell Ross, a prominent member of the Savin Hill Yacht Club



Coxswa'n C. L. Benton enlisted in the U. S. N. on July 2, 1918



Seaman Edward L. Merritt, Jr., member of Malta Boat Club and Lavalette Yacht Club





Gunner's Mate Frank S. Ayers, Jr., of Bridgeport, Conn., on U. S. S. Kroonland

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After three months in command of Sectional Patrol No. 21, Ensign Dominick was transferred to the staff of the tactical group and then to the staff of the New London Experimental Station. In February, 1918, he was promoted to lieutenant, junior grade, and shortly afterward sent abroad by the special board on anti-submarine devices to use the instruments under actual conditions in European waters, and to report back when

it was considered advisable.

During the three months overseas, he had the good fortune to be on American, British, and French ships, working with the detection devices, and made one attack while on a cruise with the British vessels. During his stay overseas he had some experience with dirigible balloons from the standpoint of the anti-submarine problem. He was ordered to return to the Naval Experimental Station, New London, in May, 1918, and in July was transferred to aviation by Washington, to carry on the development of detection devices from dirigible balloons in conjunction with the general anti-submarine problem. He became a qualified pilot for dirigible balloons in August. He was then ordered to return to the Naval Experimental Station in London to carry on the work, and was put in charge of the Aircraft Department there. On October 1, he was promoted to lieutenant (senior) in the Naval Reserve Flying Corps, and was placed on inactive duty December 12.

Ensign Otes Cook Stanton

SERVICE abroad with the American Battle Squadron attached to the British Grand Fleet was the good fortune of Ensign Otes Cook Stanton, of New Bedford, Mass. Ensign Stanton enrolled in the Second Naval District in April, 1917, and was made an ensign. He was placed in command of the converted yacht Charmion II, Sectional Patrol No. 696 officially. This boat was assigned as one of the scout patrols under the direction of the Gunboat Sacramento until that warship was ordered to Gibraltar. Ensign Stanton's craft was then sent to the Block Island patrol. Later, he was ordered to report to the commanding officer of the Dreadnaught Florida, in August, 1917.

With the Florida he sailed in November, 1917, for the other side, where his vessel became a part of America's contribution to the British Grand Fleet, and he remained aboard the Florida until her return to New York Harbor the day after Christmas.

Lieut. Reuben B. Clark

ECAUSE of his technical knowledge of boat construction, Lieutenant Reuben B. Clark, member of the Corinthian Yacht Club, of Philadelphia, the Cape May Yacht Club, of Cape May, and the Council of the American Power Boat Association, was detailed for inspection work during the war. He was appointed assistant inspector of wood hull construction for the Navy, a civilian appointment, from April 6, 1917, to April 6, 1918, and stationed at the plant of the Mathis Yacht Building Co., Camden, N. J. His duties there made him resident inspector in charge of the construction of the 110-foot submarine chasers, and the rebuilding and repair work on the hulls and engines of section patrol boats.

When his civil service appointment expired he was appointed assistant inspector of hull material for the Navy, with the rank of lieutenant, junior grade, in the Naval Reserve Force, and from April 6 to December 5, 1918, was stationed at the office of the inspector of hull material in the Post Office Building, Philadelphia. His duties consisted of being outside superintendent in charge of inspection and testing of auxiliary machinery, special material, ship fittings, and machine tools building for the Navy Department in the Eastern District. On December 5, he was promoted to lieutenant (senior) in the Construction Corps,

but his duties and station remained the same.

Lieut. Allen Potter

OINING the Naval Reserve Force in 1916, First Lieutenant Allen Potter, Sanitary Corps, United States Army, Boston, did not take to the water when the war broke out, but decided that he would fight with the army. He had made the cruise of the Naval Reserve on the U.S.S. Virginia in the sum-He had made the mer of 1916, but in September, 1917, he received a commission as a first lieutenant of the Sanitary Corps and accepted. He sailed for France immediately with Major Joel Goldthwait, of Boston, and was still overseas when the armistice was signed. He was stationed at Base Hospital No. 8. Both Lieutenant Potter and his father, Dr. William H. Potter, are ardent yachtsmen and both expect to resume the sport this summer, although the Doctor, who is a Major in the American Expeditionary Force, has also been in France since May, 1917.

Yeoman John W. Weber, Jr.

LTHOUGH he enlisted in the Naval Reserve Force June 13, 1917, John W. Weber, Jr., of Brooklyn, was not called into active service until November 25 of the same year, He was sent to the training station at Pelham Bay as a Seaman, first class. Here he received two months' training in seamanship, navigation, small arms, ordnance, etc., and then was assigned to the Quartermaster's school, coming through as a Quartermaster, third class, after a two months' course. were badly needed at the time and he was sent to the Third Regiment Headquarters in that capacity and later to the Seventh Regiment Headquarters in the same capacity. He was released from active service December 21.

Boatswain's Mate Peter L. Streit

ERVICE in the Sectional Patrols exclusively was the part of Peter L. Streit, Boatswain's Mate, first class, the son of Mrs. M. I. Streit, of Grand View-on-Hudson, N. Y. At the age of twenty, young Streit enlisted in the Naval Reserve Force in March, 1917, anticipating the coming struggle and desiring to be among the "first to fight." He was rated as a seaman and assigned to duty on board the Nemesis, Sectional Patrol No. 343, based at Sayville, L. I., and in November, 1917, he was transferred to Bensonhurst, L. I., and promoted to Coxswain.

Then followed a period of service aboard Sectional Patrol No. 353 during the spring of 1918, and a bit later he was again promoted, this time to his present rating. He was transferred to Sectional Patrol No. 145 and was based at Key West, Fla., until

the close of hostilities.

Machinist Mate R. F. Wakefield

HREE narrow escapes, when his vessel was fired at and still in the land of the living was the good fortune of Reginald F. Wakefield, Machinist Mate, first class, who had been doing duty on Sectional Patrols and submarine chasers off the coast. One of the attempts to torpedo his vessel nearly succeeded, the torpedo passing within two feet of the craft's side. Machinist Mate Wakefield enlisted November 12, 1917, in the Naval Reserve Force and had his training at Pelham Bay.

From there he was transferred to the Submarine Base to be assigned to sea duty. For eight months he saw strenuous sea duty, and it was during that period that the attempts to "get" his vessel were made. Mr. Wakefield prides himself on having the cleanest and best kept engine and engine-room in the entire

fleet that his vessel is attached to.

Machinist Mate Clarence Garner

HE 110-foot submarine chasers have been called upon to stand some very severe weather and have come across in fine shape," says Clarence Garner, Machinist Mate, first class, of 30 Homestead Ave., Stratford, Conn., a member of the Pootstuck Yacht Club of Stratford.

Machinist Mate Garner has seen his naval service entirely on the Sectional Patrols, and so is qualified to speak with authority. He has had the good fortune to be much with one of his best friends, a Chief Machinist Mate, who is a member of the Mia-

mogue Yacht Club, of Bridgeport, Conn.

Chief Machinist Mate J. D. McKay

SLEEPING between rubber blankets on the Sectional Patrols because the boats leak so badly in chicago McKay, Chief Machinist Mate, has had some hard experiences on these craft, but through it all he has kept a good countenance and was happy in being sent overseas. He enlisted in the Navy September 17, 1917, and was rated Machinist Mate, December 1, he was sent to Columbia University for a special course on the engines of submarine chasers. graduated in the spring and was given a first class rating. Then followed a period at sea on the S. P. No. 355. During the summer he hunted submarines off the American coast, having a great many narrow escapes.

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Small-Boat as Well as Large-Boat Sailors Who Made Good Navy Men



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Henderson Cos, a member of the Orienta Yacht Club, Mamaroneck, N. Y.



Lient. Com. Lewis P. Clephane, of Washington, D. C., who has been assigned to duty at the Burcau of Navigation, Lommander Section 1, Fifth Naval District



Lieut, W. D. Kipp, of Newport, Vt., at present stationed at U. S. Naval Base 25, Radio Office in the Adriatic



Ensign W. L. Hawes, a member of the New Bedford Yacht Club New Bedford, Mass.



Coxswein H. E. Gerber, aboard U. S. S. Federal



First Class Machinist's Mate R. F. Wakefield on U. S. torpedo chaser. He enlisted November 12, 1917



Capt. Clarence Ball of 5th Regiment, U. S. Marine, France, formerly commodore of Genesse Dinghy Club



Ensign Langley How thorn, U. S. N. R. F., in transport service



J. Lincoln Crawford, Norwich, enlisted in the Coast Guards

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He left for foreign waters September 1, 1918, and his squadron had the good luck to sink a submarine the day before the armistice was signed. On the day he sailed he was rated Chief Machinist Mate. He is in charge of the engine-room on his craft and was still in European water for Christmas and New

Yeoman A. A. De Vito

WHEN the pages of the war come to be written from the inside the work of the Naval Intelligence Department will show many exciting adventures which the strict censorship has hitherto suppressed and A. Alfred De Vito, of New York City, will be able to add his paragraphs of adventure to the general volume.

Entering the Naval Reserve Force on April 4, 1918, he was at once rated as a Yeoman, second class, due to his experience in the State Labor Department of New York. Yeoman De Vito was detailed to the Intelligence Bureau, and this office in the Third Naval District had complete charge of the inspection of outgoing and incoming vessels of all flags in the transport of men and supplies to and from Europe.

Ensign V. N. H. Bates

RUISING with the South Atlantic Squadron in South American waters, Ensign Van New H. Bates is spending the winter months pleasantly. He entered the Naval Reserve Force April 2, 1917, and was at Marblehead Neck and Bumpkin Island as an able seaman for several months. tered the Cadet School for officers training at Harvard October 10, 1917, and was graduated February 11, 1918, standing thirtyfirst out of a class of 150 students. February 22 he was assigned to the U. S. S. Nebraska. About the middle of May he went with his ship to South America and was made Assistant Navigator, which position he held until he was transferred to the Artigari, and later he was moved once more, the time to the Pittsburgh, the flagship of the South Atlantic Squadron.

Channing Follette

R ELINQUISHING a growing law practice to enlist in the Naval Reserve Force as a "gob," Channing Follette, of Los Angeles, Cal., has had interesting experiences with the Bureau of Intelligence, his duties in that branch of the service taking him to many distant points. Later, he attended the Officers' Training School at San Pedro, Cal., and completing his training on January 20 of this year, he received a commission. He will serve a short period as an officer before returning to the practice of law.

C. P. O. Russell Ross

MAKING a variety of European ports was the good fortune of Chief Petty Officer Russell Ross, who enlisted in the Navy in November, 1917, and who was assigned to the U. S. S. Standard Arrow, which made six round trips to Europe, touching in England, Ireland, Scotland, Wales, and France. Mr. Ross lives in Dorchester, Mass., and is one of the most popular members of the Savin Hill Yacht Club.

Ensign W. L. Hawes

MEMBER of the New Bedford, (Mass.) Yacht Club when the war broke out, Ensign W. L. Hawes, of New Bedford, enlisted April 10, 1917, and was given a rating as Quartermaster, second class, and ordered to Newport. six weeks' training he was placed on Sectional Patrol No. 14, and on that craft he patrolled off Newport until July 1. At that time he was transferred to Sectional Patrol No. 630 at New London and then came a period of patrol duty between New London and Block Island. On October 25, 1917, he was promoted to Chief Quartermaster.

In December, 1917, after taking an examination at Newport, he was commissioned as Ensign and ordered to report to the U. S. S. Galveston. While Junior Watch Officer of the Galveston for nine months he made a number of trips across, doing convoy work. In November, 1918, he was detached from the Galveston and ordered to report to the Naval Training Station at Hingham, Mass., where he was made Senior Officer

of the First Division.

Coxswain Verner R. Anderson

MOTOR boating has lost one of its most enthusiastic sup-porters in the death of Coxswain Verner R. Andersoa, of Meriden, Conn., which occurred on September 20, 1918, of Spanish Influenza. Coxswain Anderson had been only one week when his end came. He died at the New Lon-

don Base Hospital.

He enlisted in the Naval Reserve Force July 14, 1917, at New London as a Seaman, first class, and was called into service September 6, 1917, at Newport, R. I. After six weeks' training at Newport he was transferred to Sectional Patrol No. 118, and he spent eight months patrolling the coasts between New Jersey and South Carolina, with his base at Norfolk He was promoted to Coxswain in April, 1918. In July of that year the boat came north and he was stationed at New London, when he caught the Influenza.

Machinist Ralph B. Boisset

LTHOUGH he was in the Navy for more than a year, Ralph P. Boisset, of New York City, Machinist on the U. S. S. Von Steuben, was unable to get across the Atlantic. Machinist Boisset says that unfortunately the farthest that his job took him was the inspection of the many naval units in the Third Naval District. He had hopes finally of getting across, as he was detailed to the Von Steuben, the former German raider Crown Prince Wilhelm, then undergoing repairs in New York, and was due to go over to France to bring the doughboys back.

The VonSteuben was one of the fastest of the German merchant fleet and in her career as a raider she was credited with sinking over a dozen merchant ships before she was interned in Hampton Roads. "I would like to know what some of our little pleasure boat enthusiasts would think when assembling their engines in the spring. I would like to help them by informing them that the Von Steuben has sections of crankshafts

that weight over twenty-five tons."

Ensign Walter Paul Groszmann

ROM New London, Conn., to Corfu, Greece, on a 110-foot ROM New London, Conn., to Cortu, Greece, on a state of Submarine Chaser is some trip to make on one of those little boats, and Ensign Walter Paul Groszmann, of Bayside, L. I., a member of the Bayside Yacht Club, has write account of the experiences of ten home a very interesting account of the experiences of the men on these little boats. Ensign Groszmann enlisted in the Navy March 29, 1917, and after several months' training was assigned to Sectional Patrol No. 327. This craft went first to New London, where, during the severe winter weather, the crew of twenty-two men received wonderful training in seamanship, gunnery, navigation, etc. Late in February, 1918, the S. P. No. 327, one of a fleet of

twelve Chasers, Submarines, Destroyers and other small craft, left New London for Bermuda. On the voyage they en-countered the worst storm of the season, February 25, 26, and 27. During this hurricane it was necessary for the commanders of the boats to be on the bridge hours at a time, with little or no sleep. After this gale all hands agreed that the

110-foot chasers could weather any storm.

The boats were some time in Bermuda, where the people vied with one another in showing them a good time, and the middle of April the fleet, now augmented to thirty-nine vessels, left for the Azores. Thence to Gibraltar, next to Malta, and finally to the Island of Corfu. As nine of the chasers (the remainder of the fleet staying behind for a few days) entered the port, the crews of the Allied ships, from trawlers to dreadnaughts, lined the rails and yards at attention, the officer of the deck aboard each giving each of the Chasers a snappy salute.

The work in the Mediterranean consisted of mine laying. submarine hunting and patrol work, with periods of five days at sea alternated by five days in port. No. 327 was one of those chosen to proceed into the Adriatic, when before Durazzo, October 2, they took part in the offensive against the shore bat-

Lieut. Eben H. Ellison, Jr.

ARLY in April, 1917, shortly after the United States de-RALY in April, 1917, shortly after the United States declared a state of war existed with Germany, Lieutenant Eben H. Ellison, Jr., of Boston, together with a number of his classmates at Harvard, formed a unit and enlisted for (Continued on page 52)

Officers and Men Who Were Chosen From the Ranks of Yachtsmen



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enlisted for patrol service. Most of these boys were athletes and members of the football team. The steam yacht Talofa, a boat of about 100 feet, was given them, and young Ellison ,was on board of her engaged in patrol work until October, 1917.

At that time he was appointed Ensign and sent to Annapolis. He graduated from the Naval Academy in the latter part of January, 1918, being ordered to the Des Moines. On this warship he did convoy work with the troops until June, 1918, when he was ordered to Fore River to the Destroyer Maury, then in course of construction. Maury was launched July 4, 1918, and early in September she went into active service, doing duty in the North Sea and off the coast of France and later in the Mediterranean, with her base at Gibraltar. In October, 1918, Ensign Ellison was made Lieutenant Ellison.

Frank A. Cincotta

CROSS the Atlantic Ocean on Sectional Patrol No. 323, Frank A. Cincotta, of the Savin Hill Yacht Club, Dor-chester, Mass., saw real sea life. He enlisted as a cook, second class, in September, 1917, and was assigned to the No. 323. With this little vessel he sailed from New London, Conn., for the Azores, and from there went to Brest. After a short time in the French port he was ordered to Liverpool, and later to Plymouth, and so finally to Queenstown, where he was at the time the armistice was signed.

In a letter to his brother, Joseph Cincotta, from Falmouth, dated December 9, he says, "We are at present in Falmouth for a few days and then go back to Plymouth. In all there are sixty of the chasers here, thirty having come from Queenstown. I think they will sell as many as they can of the chasers to the foreign governments and the others will be sent back to the States. I think our boat will be sold before long, as there are quite a few civilians looking at it. Our boat is the cleanest and best of all, including the engines, as our record in the office shows 100 per cent. We were forty miles away when the Leinster, the mail boat from Kingstown to Holyhead, was sunk. There were six of us, and when we got the message we were off. We dropped twenty-four depth bombs and I believe we got her, as we saw oil spots.

Lieut. Com. Lewis P. Clephane

MPORTANT duty was accorded to Lieutenant Commander
Lewis P. Clephane a member of the Lewis P. Clephane, a member of the Capital Yacht Club of Washington, and he is presently on duty in the Bureau of Navigation in Washington. Enrolling in the Naval Reserve Force February 24, 1917, as a Lieutenant, he was ordered to active duty March 16, 1917, about three weeks before this country declared war, and he has been continuously on duty ever since, with but forty-eight hours' leave during the entire period. He was first ordered to report to the Commandant of the Fifth Naval District at Norfolk and almost immediately detailed as a member of the Inspection Board, which made a cruise of about a month's duration in Chesapeake Bay aboard the U. S. S. Fish Hawk inspecting vessels available for duty with the Navy. During this cruise fifty-five of the Menhaden fishing steamers were inspected and reported upon, with the result that most of-them were refitted for duty as mine sweepers.

On April 18, Lieutenant Clephane was ordered to the com mand of the Naval Base at Baltimore, with additional duty as Senior Member of the Joint Army and Navy Board of Survey for that district. Later, when the transport work began, he was also made Supervisor of the Naval Overseas Transportation Service for that port. In the meantime, June 25, 1918, he was promoted to Lieutenant Commander. Then, with all naval activities at Baltimore under his direction, it was necessary to increase his staff, which grew from three officers and a few yeoman to thirty officers and 600 men. During this period about twenty of the overseas transports were reconstructed, guns mounted and commissioned.

The duties of the Base Commander were varied and many, and aside from those of the usual military nature comprised also the supervision of the Naval Intelligence, Port Guards, Communications, Convoy routing, Patrol boats and numerous others. In addition to the permanent staff under Lieutenant Commander Clephane there were at times more than 100 officers reporting to him for duty in connection with overseas vessels which were fitting out. On the signing of the armistice he was detached from duty in Baltimore and assigned to duty in the Bureau of Navigation in Washington.

Bugler George Beach Hesley

BUGLER who "got them up in the morning" was George Beach Healey, of Dubuque, Iowa, a member of the Dubuque Motor Boat Club. Mr. Healey left Cornell to join the Naval Reserve Force two days after war was declared. At Newport, R. I., where he was first stationed, he was made bugler. Here he remained doing shore duly and "getting 'em up" until October, 1917, when he was transferred to the U. S. S. Winchester, Sectional Patrol No. 130. On this craft he did patrol duty off the New England coan and later went with her to Yorktown, Va., to engage in experimental work. He was promoted to Boatswain's Mate, second class, and transferred to the U. S. S. Caesar, a cargo carrying ship on which he went across. He was abroad on Christman Day, but cabled back a Christmas greeting to his relatives and friends.

Lieut, Franklin Farrell, Jr.

LTHOUGH in command of Patrol boats off the Ameri-A can coast, at one time based on Newport, R. I., and at another using New London, Conn., as their base, Lieutenant Franklin Farrell, Jr., of New Haven, Conn., a member of the New Haven Yacht Club, was not fortunate enough to get across. His services were needed in this country as an ordnance inspector by the Navy Department, and on October I, 1917, he was transferred from command of a Patrol boat to shore duty as an ordnance inspector. Licutenant Farrell en-rolled in the Naval Reserve March 15, 1917, and was called to active service May 3, 1917.

Ensign Joseph H. Mundy

NDETERRED by his forty-two years, Joseph H. Mundy, of Beachmont, Mass., a member of the Bay State Yacht Club of Revere, Mass., volunteered in the Naval Reserve Force and was accepted May 1, 1917, being given the rating of Two weeks were spent at the Naval Training Station at Marblehead. Ordered to the converted yacht commanding officer, he served on harbor and coast duty until he was sent to the Boston Navy Yard, where he was assigned to the Mt. Vernon, while she was fitting out for transport service. Just prior to her sailing he was assigned to the Sectional Patrol No. 253, where he served a short time and then was ordered to the Sectional Patrol No. 92 in November, This boat was at the Brooklyn Navy Yard at the time, but shortly thereafter was ordered to New London, Conn.

About February 22, 1918, he sailed overseas, Sectional Patrol No. 92 being the flagship of a fleet of Chasers that made the trip across. These little craft touched at Bermuda and Gibraltar on the way over. Ensign Mundy wrote back that the boats made the trip without the slightest engine trouble and never had to ask assistance from any other vessels. He spoke of their seaworthiness in the highest terms.

Quartermaster C. Harry Green

ORPEDOED on the U. S. S. William Rockefeller, an oil tanker off the east coast of Scotland May 18, 1918. Quartermaster C. Harry Green, of Brooklyn, had a narrow escape from drowning. Quartermaster Green was on his fifth trip across when his ship was sunk under him. Previous to the war he was Rear Commodore of the Belle Harbor Yacht Club and entered the service with the rating of Quartermaster, first class, May 21, 1917.

After his rescue from the William Rockefeller, Quarter-master Green was brought back to the Brooklyn Navy Yard and was assigned to the U. S. S. Sylvan Arrow, another tank ship, on which he made one trip across. When he returned he secured a transfer to shore in order to take the officers' training course for Ensign, but caught the Influenza and before he had fully recovered the armistice was signed. December 13 he was released from active duty.

Lieut. Richard S. Townsend

FROM Seaman, second class, to Lieutenant (senior) is the record of promotion of Richard S. Townsend, of Boston. who enlisted in the Naval Reserve Force May 8, 1917, as Seaman, second class, and was detailed to the Naval Aviation and reported at Newport News on May 29, After service at (Continued on page 63)

Yachting Experience Helped All These Motor Boatmen



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Lieut, Burton R. Miller, Executive Officer First Naval District



Peter Hendricks, enlisted at the outbreak of the war



Wm. M. Hanno, a member of one of the prominent Yacht Clubs



Warner P. Purdy, U. S. N. R. F.



Ensign Hobert W. R. Wheeler, of New Rochelle, N. Y.



Lieut, John C. Reid, a member of the American Model Yacht Club



Clarence and Frank Garner, both members of the Genesee Dinghy Club of Rochester, N. Y.



Ensign John G. Alley, of the Larchmont Yacht Club, Larchmont, N. Y.



Ensign H. M. Selling, of the Ambrose Channel Yacht Club



Oscar Gunther, U. S. N. R. F., of Bayonne, N. J.



First Class Boatswain's Mate Peter L. Streiton board S. C. 145



Boatswain's Mate Leo J. Williams, of Chester,



Conswain Gustave E. Vigorous of Huguenes Yacht Club

First Complete List, to Be Published, of the Names of Members of Yacht and Motor Boat Clubs Who Joined the Naval Forces of Our Country

Adelphia Yacht Club, Philadelphia

Midge Aaron, Ensign Thomas Hayes, Chief Machinist Roya, A Miller, Chief Electrician Joseph Niering, Chief Musician David Olwell, Chief Machinist's Mate George Tallman, Chief Machinist

olian Yacht Club, Alameda, Cal.

A. L. Anderson
A. H. Brocklank
J. A. Cassidy
William Cox
A. Handman
C. A. Lozier
H. H. Magee
F. McLean
G. W. Raubinger
H. J. Whorty

Albany Boat Club, Albany, N. Y.

Albany, N. T.
Thomas T. Bissel
Roy J. Conley
Wm. L. Martin, Lieut J. G.
Sylvanus H. H. Parsons, Lieut.
J. G.
Archie Sherlock
George A. Smith
C. A. Trick
C. L. Williams

Alpha Boat Club, Chester, Pa.

James S. Albany Homer H. Berry Th. Leiper Black A. R. Cochran J. Chas. Longbotham Thos. Jos. McFate Herbert T. Quinn John W. Shaw Leo J. Williams

Ambrose Channel Yacht Club, Bath Beach, Brooklyn, N. Y.

Wm. J. Davis, C.P.O. Harold J. Gahn, C.P.O. Wm. L. Hudson Wm. Hughes, First Class Electrician
L. Wm. Mowry, First Class M. M.
H. M. Selling, Ensign
Rowland J. Sweeney
American Model Yacht Club,
Brooklyn, N. Y.

Henry Ost H. C. Reid A. Southerland

American Yacht Club, Newburyport, Mass.

Newburyport, Mass.
John Balch Blood, Lieut.
Dr. T. Raymond Healey, Lieut.
Henry B. Johnson, Carpenter's
Mate
Fred G. Kimball, Musician
Henry B. John, Carpenter's Mate
Byron S. Knowles, Merchant
Marine
Leon M. Little, Lieut.
Philip C. Ware, Lieut.

American Yacht Club, Rye, N. Y.

Nye, N. I.

Donald Bayne, Gunner's Mate
John Scuyler Beach, Landsman for
Wireless Service
Daniel Drake-Smith, 1st Class
Boatswain's Mate
Oliver Carley Harriman, Eusign,
Naval Academy
Wm. D. F. Leith, 2nd Class Seaman

man Mulford Martin, Ensign Herman Armour Nichols, Ensign Wm. Remsen, Ensign Esslick Shelden Sherman, 1st Class

Atlantic Yacht Club, Sea Gate, Coney Island, N. Y.

W. Seward Allen
Clifford S. Bailey
H. S. Beardsley
Raymond H. Finley
Geo. R. Le Sauvage
Harry M. Martin
Warren W. Sheppard
William W. Struthers
Murray Vernon
Theo. D. Wells

Babylon Yacht Club,
Babylon, L. I.
A. D. C. Arnold
Noel L. Carpender
Jas. R. Hyde
Charles L. Lehman
Jonathan Thompson
Baldwin Harber Yacht Club,
Baldwin, L. I.
A. R. Mulkins. Chief Boatswain A. R. Mulkins, Chief Boatswain

Baltimore Yacht Club, Baltimore, Md.

Baltimore, Md.
J. S. Fulton
J. A. Gary, Jr.
W. W. Grier
C. E. Henderson, Jr.
A. Dana Hogdon
Fredk. C. McCormick
W. Hughlett Naylor
W. D. Waxter

Barrington Yacht Club, Barrington, R. I.

Dwight Colley Robert L. Cros Robert L. Cross Arnold S. Hoffman George A. Midwood

Arnold S. Hoffman
George A. Midwood
Bay Head Yacht Club,
Bay Head Yacht Club,
Bay Head, N. J.

Anthony Abable, Ensign
Alice J. Baxter, 1st Class Yeoman
Carroll S. Bayne, Ensign
Sidney S. Brewster
H. W. Buxton
R. H. Byrne, Ensign
Orton G. Dade, Jr., Ensign
Orton G. Dade, Jr., Ensign
Robert A. Dahn, 2nd Class Seaman
Emile Du Pont, Midshipman
Joseph F. Edwards, Lieut.
Erskine Hazard, Ensign
J. H. Hentz
Wm. J. Littell, Pay Director
W. S. MacLaren, Jr., Midshipman
H. K. McCau, Lieut.
Donald F. Miller, Ensign
W. H. Nimick, Jr., Machinist's
Mate, First Class
Courteneay Overman, Gunner's
Mate
Neil P. Overman, Ensign
Wm. M. Paxton, III
P. M. Pope
Ralph Souder, Jr.
S. L. Van Vechten, 2nd Class
Seaman
John R. Whitney, Ensign

Seaman John R. Whitney, Ensign

Bayonne City Yacht Club, Bayonne, N. J.

George Brown Walter J. Deubert, Seaman Edward Frazer Edward Frazer Fred. Kraft Ensign Walter P. Nelson

Bay Shore Yacht Club, Bay Shore, L. I.

H. Aubrey Brewster
Thomas Farrell
E. P. Franklin, Lieut.
Dr. Jos. Low
R. B. Roosevelt, Lieut.
Ralph de Stefane, Seaman

Bayside Yacht Club, Bayside, L. I.

Bayside, L. I.
John Adikes, 2d, Ensign
Oliver Alford
Bruce Altchison
Leonard E. Beard, Ensign
Carlton Copp.
Donald Cowl, Ensign
Bertram Darling
Waiter S. Dayton, Lieut.
Sheldon Deardon
Norman E. Donnelly, Ensign
Richard Dorgan
I. Paul Falconer, Q. M.
Val P. Fogh
Chas. A. Gould, 2d
Waiter P. Groszmann, Ensign
Howard Keppel
Walter J. Lee, Lieut.
Arthur Logan
Edwin Logan
Malcolm Mackensie, Lieut.
David H. Markell
Chas H. Medicus, Q. M.
Alexander W. Moffat, Ensign
Walter L. Powers, Lieut.

Anson G. Purchase Edwin Shuttleworth Ferris P. Smart, Q. M. Fred. C. Smith, Ensign Frank L. Stiles, Lieut. Charles B. Struthers, Jr. Charles Norton Thomas Harold C. Vause Edward G. Walsh, Q. M. Richard R. Walsh, Q. M. Richard R. Walsh Louis B. Warner, Q. M. Wm. Nash Webb C. Lawson Willard, Q. M.

C. Lawson Willard, Q. M.
Bay Spring Yacht Club,
West Barrington, R. I.
Charles T. Christie
LeRoy G. Lomes
John T. Morrissey
W. Raymond Sidebottem
Bay State Yacht Club,

Revere, Mass.
J. Lee, Chief Commissary Strward
J. McDougal, Chief Machinist's

J. McLeougal,
Mate
J. H. Mundy, Ensign
J. Quinn, Seaman
A. V. Johnson, Quarterm

Baywater Yacht Club,
Bayonne, N. J.
C. Roy Auster
Oscar Gunther
Wm. Kunze
Fred. Martin
Chas. Merry
Gus Windeneck

Beachmont Yacht Club,

Roscoe Gabler Robert Kane Alfred R Kelley Alfred R Kelley
Belle Harbor Yacht Club,
Brooklyn, N. Y.
Ernest V. Abrams, Ensign
George H. Arfman, Seaman
J. F. Baldes
Francia J. Boyd, Seaman
Earl V. Burrows, Q. M. 2nd
Harold P. Byrnes, Seaman
C. Harry Green
Alfred C. Thielman, Seaman

Alfred C. Thielman, Seaman
Belleville Motor Boat Club,
Belleville, N. J.
Marvin Abbott
Raymond Abbott
John Eyre
Dewey Eyre
Daniel Guldner
Leonard Lloyd
Louis Mazza
Howard Morgan
John Morgan
Peter G. Ori
Morris Wright
Bargen Beasch Vacht Club

Bergen Beach Yacht Club, Brooklyn, N. Y. F. S. La Fond

F. S. La Fond

Beverly Yacht Club,

Marion, Mass.

Elsha Converse

R. W. Emmons, 2nd

R. W. Emmons, 3rd

Augustus H. Eustis

J. Philip Hartt

R. F. Herrick, Jr.

John Parkison

Edgar Pierce

Howard Stockstone, Jr.

Robert G. Stone

Mosely Taylor

Hallett W. Thorne

Biscayne Bay Yacht Club, Miami, Fla.

J. S. Bigelow
Marshall Field
H. deB. Justison
Hugh M. Matheson
J. C. McCoy
H. G. Ralston
Albert Ross, Admiral
Homer St. Gaudens
Henry Sanford
Black Rock Yacht Club, S. Bigelow arshall Field

Bridgeport, Conn.
N. W. Bishop
W. Gerald Bryant
Boothbay Harbor Yacht
Club, Boothbay Harbor, Me.
Chas. Hugh McLellan
Frank W. Sawyer, 1st Class Sea-Chas. Hugh McLellan Frank W. Sawyer, 1st Cl man Arthur C. Torrey, Ensign

Boston Yacht Club,
Boston, Mass.
Ernest G. Adams
John Black, Jr.
Harold P. Cooley
Charles P. Curtis, Jr.
Frederick A. Fenger
Walter C. Heyer
Stewart T. Lamson
Edward W. Lombard
Pierce Long
Herbert A. McInnis
Eliot S. Mildram
Burton R. Müller
Roland C. Nickerson
William J. Fettis
Robert W. Rose
Vernon F. West
Broad Channel Yac

Broad Channel Yacht Club, Arthur C. Evans Warren Green

Bronx County Yacht Club, Inc., Clason Point, N. Y. Henry McNeil Henry McNeil Paul Pansegran Arthur Schroeder Edward Wendling

Brooklyn Motor Boat Club Inc.

Karl M. Boenau
John R. Brophy, Captain
Raymond Bushey
Julius P. Hieber, Jr.
William Hughes
L. Wm. Mowry
C. Frederick Muller
Germanio Riceoo
Frank Rogers
Hamilton Tibbels
Edward Traynor, Seaman
J. Humphrey White, Ensign
J. Leo White
Prentice A. Whiting, Comman

Buffalo Launch Club, Buffalo, N. Y. Ralph H. Sidway George Kinney J. P. Wilson

Buffalo Yacht Club, Buffalo, N. Y. R. H. Heussler Lee Hinslea Geo. Newbrook, Jr. A. G. Stroman

Burlington Launch Club, Burlington, Ia. Carl Basche

Carl Basche

Cambridge Yacht Club,
Cambridge, Md.

Thos. E. Kerr, Jr., S. K.
Roscoe C. Leonard, Cox
Levi D. Prettyman
Richard J. Smith, Chief Yeomat
Herbert Travers, Yeo, 1st class
Hunter Wilson, S. K., 1st class
W. Briley Wright, Q. M. 1st

W. Briley Wright, Q. M. 1st
Cape May Yacht Club,
Cape May, N. J.
Walter A. Bell
Reuben B. Clark
J. Warner Hutchins
E. C. Leedon
Louis Jack Shoemaker
Richard L. Young

Capital Yacht Club, Washington, D. C.
Dr. E. A. Bryant
L. P. Clephane, Lieut.
L. H. Dyer, Lieut.
W. W. Grier, Ensign

Carolina Yacht Club, Carolina Yacht Clul
Charleston, S. C.
Thos. P. Allen
Bartley Bull
W. P. Carrington, Jr.
A. de J. Chisolm
R. F. Fraser
C. D. Gadsden
Arthur Grimball
O. Harleston Lesesne
Beverly Mikeli
C. Otto Sparkman
E. H. Sparkman, Jr.
T. Grange Waring
F. Marion Waley
(Honor Roll contin

(Honor Roll continued on page 56)

Amateur Sailors Who Made Splendid Fighters

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(Continued from page 54)

Carondelet Motor Boat Club, St. Louis, Mo.

Wm. Rudolf, Jr.

Cedarhurst Yacht Club. Lawrence, L. I.

Harold Brooks, Ensign D. H. Cox, First Lieutenant Newbold Herrick, First Lieutenant Harold Herrick, Ensign Byam Stevens, Ensign

Chelsea Boat Club,
Norwich, Conn.
Prancis C. Bidwell
Traver Briscoe, Ensign
Daniel L. Brown
I. Lincoln Crawford
Frank W. Holms, Mach, Mate, 2nd
Arthur C. Larsen, Chief Yeoman
Harry F. Pewers, Quartermaster
3rd
Harold C. Preston

3rd Harold C. Preston Robert E. Preston, Seaman Ad. Guy A. Sullivan, Quartermaster Robert E. Preston, Guy A. Sullivan, Ird Julian L. Williams

Chelsea Yacht Club, Chelsea, Mass.

Chelses, Mass.
A. R. Bustedd
F. A. Cline
Andrew Cornfoot
B. L. Duncan
S. E. Guthrie
I. J. Holden
E. J. Quigley
H. W. Roberts
S. E. Rathburn
Joseph X. Wingate
Geo. E. Winsor

Chi. Winsor
Chesapeake Bay Yacht Club,
E. R. Brick, C. B. M.
P. L. Goldsborough, Chief Machinist's Mate
Rees Hawkins, Ensign
Fred. Wilson, 2d Class Boatswain's Mate

Fred. Wilson, 2d Class Boatswain's Mate
Chicago Yacht Club,
Chicago, Ill.
Edward F. Bell, Warrant Officer
Ayres Boal, Lieut.
William T. Cooper, Lieut.
William T. Cooper, Lieut.
Hon. J. Farley, Ensign
Thos. J. Frindiville, Lieut.
Harry V. Good, Ensign
John F. Jelke, Jr., Ensign
Ogden T. McClurg, Lieut. Com.
H. W. Nordyke, Ensign
Louis C. Roberts, Lieut. Com.
Chas. W. Schick, Ensign
E. E.Sheridan, Lieut. J. G.
Maurice M. Smith, Ensign
Paul Springer, Lieut. J. G.
Chas. N. Steele, Ensign
Adrian A. Walker, Ensign
George L. Weed, Ensign
George L. Weed, Ensign
Milton Wilson, Ensign
Cobasset Yacht Club,

Mitton Wilson, Ensign
Cohasset Yacht Club,
Boston, Mass.
John Black, Jr.
Arthur Blake
Richard H. Cobb
Robert Fulton
Lester W. Harding
Chas. Higginson
Fred. Higginson, Jr.
Geo. T. Newton, Jr.
Lames Newton Geo. T. Newton, Jr. James Newton Ralph Stoddard Gilbert L. Tower Prescott Townsend Richard L. Townsend Wendell Townsend J. C. White M. L. Williams

Colonial Yacht Club, New York, N. Y.

New York, N. I.
J. B. Bashore
Wm. S. Bennett
R. P. Boissett, Chief Machinist
Sigmund Cohn, Ensign
David Crow, Ensign
A. A. DeVitto
S. W. Guest
John B. Howe
H. C. Perry
Thomas Terry
Harry T. Vlyman

Columbia Yacht Club, Chicago, Illa. Wm. B. Brayton, Chief Boat-swain's Mate S. Brooks, Chief Quartermaster J. Carrick, Lieut. U. S. S. J. Carrick, Lieut. U. S. S. Vermont L. Chetlain, Lieut. Coghill, M. M. I. Conboy, Ensign Connell L. C. Cowen, Chief Boatswain's

Conneil
Id. C. Cowen, Chier
Mate

A. Coxhead
Dick Dalmar, QM. 1st Class
H. L. Diehl
Water Eden
D. Harry Hammer, III—Ensign
P. A. Huettig, M. M. I., U. S. S.
C. No. 90
Robert A. Hyme, Ensign
H. M. Keating
Percy W. Langtry
Alfred C. Langtry
Fred. Lindahl, Lieut.
C. C. Mowbray, Chief Warrant
Officer
A. F. Olson, Boatswain's Mate,
1st Class
1 Prohasks

C. C. Mowbray, Chief Warrant Officer
A. F. Olson, Boatswain's Mate, 1st Class
C. J. Prohaska
J. F. Richet
Mat. Rubinkam, Ensign
C. L. Sampson, Ensign
Joe M. Scribner, Mine Layer
E. P. Simons, Lieut.
Chas. N. Steele, Lieut.
Fred. C. Taylor, Quartermaster
Thos. Waage, Lieut.
Alec. Whiteld, Ensign
Robert Woodhead

Columbia Yacht Club, Boston, Mass.

Boston, Mass.

Chas. T. Bent
Wm. J. Flynn, Storekeeper
Willard M. Hanna, Machinist,
First Class
Roger C. Hay, Ensign
Peter Hendricks, Chief Machinist's Mate
Arthur Johnson, Chief Commissary
Steward
Henry Tabeling, Lieut. Com.
Geo. E. Thing, Machinist, First
Class
Thomas A. Ring, Boatswain Mate

Corinthian Yacht Club, Marblehead, Mass.

Marblehead, Mass.
Ashley D. Adams
Malcolm J. Barber
William Lambert Barnard
Van Ness H. Bates
Edward N. Booth
L. R. G. Crandon
Charles P. Curtis
Schuyler Dillon
Ernest S. Doane
Lewis Doane
George R. Duryea
Nugent Fallon
Douglas L. Furness
Harry C. Grafton, Jr.
Josiah R. Harding
T. Raymond Healy
Allen C. Jones
Alfred V. Kidd
Caleb Loring
Gregory O. Lyon
Burton R. Miller
Harold Peters
Robert W. Ross
Vernon F. West
Cornelius A. Wood
The Corinthian Yacht

The Corinthian Yacht Club, Philadelphia

Philadelphia
Henry S. Austin, Lleut.
Edward R. Cassidy, Lieut.
Reuben B. Clark, Lieut.
J. H. R. Cromwell, Lieut.
Edward C. Dale, Lieut.
U. Frazier Harrison, Lieut.
Hobart A. Hare, Lieut. Commd.
C. Sherman Hoyt, Lieut.
Howard S. Kerner, Lieut.
Howard S. Kerner, Lieut.
Howard S. Kerner, Lieut.
Robert G. LeConte, Lieut. Commd.
Carles Longstreth, Lieut. Commd.
William G. Morse, Lieut.
John Price Wetherill, Lieut.
John Price Wetherill, Lieut.
Commd.
Maxwell Wyeth, Lieut.
Commd.

Corinthian Yacht Club, Washington, D. C. R. B. Roosevelt

Country Club, Gross Point Farms, Mich.

John D. Bagley . H. P. Ballantyne Geo. A. Beecher Alfred E. Brush C. T. Chenevert Wm. T. Chesbrou

Arthur N. Goodfellow Cleveland M. Hunt Chas. B. Johnson Howard B. Lee Philip O. Mulkey C. Hayward Murphy Barnes Newberry Truman H. Newberry John S. Newberry Sydney R. Russel Allan Shelden Mark M. Sibley C. G. Waldo, Jr.

Crescent Yacht Club, Chaumont, N. Y.

H. J. Angley, Lieut.
Ambrose Durkan
F. W. Farmer
E. J. Johnstone, Lieut.
Robert Read, Ensign
Homer N. Rice
H. L. Vincent, Lieut.

Des Moines Power Boat Club, Des Moines, Ia.

Thomas Lorenze Lawrence Swarm Oscar Tramburg John Tramburg

Devon Yacht Club, East Hampton, N. Y. John M. Forbes, Jr., Ensign Henry Helier George W. Helm Dickson Potter, Ensign William Thaw, Ensign

Dorchester Yacht Club, Dorchester, Mass.

Frank Hannan Frank Hanson, 1st Class Seaman E. A. Jardine, 1st Class Seaman G. W. McGilvary, Machinist Mate M. E. McKenna, Machinist Mate

Duxbury Yacht Club, Duxbury, Mass.

G. Carleton Adams
Geo. W. Benedict, Jr.
Chas. Bittinger
Joseph F. Clark
Howard Brooks Converse
Frank Lee Converse
Frank Lee Converse
Frank Lee Converse
Gerald Courtney
Faul Courtney
Eben Ellison, Jr.
Edward Frank
Robert Gifford
Rartlett Harwood
Whitney Lippincott
Knut Lottropp
F. Rollins Maxwell
Wm. B. Nash
N. K. Noyes, M.D.
Edwin Noyes
Richard Noyes
Allan Potter
Wm. H. Potter, D. M. D.
Jas. W. D. Seymour
Graham W. Winslow
Sidney H. Wirt
H. Loring Wirt
Sumner B. Young
Eastern Yacht Club, Carleton Adams

Eastern Yacht Club, Marblehead, Mass.

Marblehead, Mass.
Arthur Adams
Reed Pierce Anthony
Nathaniel F. Ayer
B. Dev. Barker
George L. Batchelder
Godfrey L. Cabot
Norman W. Cabot
Affred E. Chase
Philip P. Chase
Charles Kimball Cummings
Charles F. Curtis, Jr.
Richard Cary Curtis
Charles L. Dane
Robert W. Emmons, 2nd
Henry Howard
John Lawrence
Charles W. Littlefield
Caleb Loring
Ernest Harvey Pentecost
Edgar Pierce
Reginald C. Robbins
Richard S. Russell
Henry Curtis Snow
Daniel R. Sortwell
Wm. Brackett Stearns
East Greenwich Yacht

East Greenwich Yacht Club,
East Greenwich, R. I.
G. W. Bliss
Triston Dow, Yeoman
C. W. Dunbar
Lyman T. Dunnell, Ensign
Henry M. Gallagher, Ensign

H. .A Grimwood Thomas C. Greene, Ensign Joseph Kilkenny, Ensign Thomas F. Kilkenney, Lieut J. G. F. T. Rogers, Dr. Geo. Smith, Ensign

Edgartown Yacht Club, Edgartown, Mass.

Edgartown, Ma
Harold Ball
John A. Brough
Marsden B. Candler
drving A. Chapman
Roe C. Duffee
Thos. F. Flynn, Jr.
Pomeroy Y. Francis
James T. Hannan
John S. Hill
Edward MacD. King
Stephen Potter
Stears Poor
John G. Poor
Charles Robertson
Paul M. Runyon
A. Donald Sexton
Edward K. Simpson
James T. Swan

Edgewater Motor Boat Club, Edgewater, N. J.

J. E. Lange

J. E. Lange

Erie, Pa.

F. A. Curtze
J. P. Donley, Ensign
W. DeWitt
R. A. Eichenlaub
J. D. Kinney
C. D. McCarty
W. L. Morrison
L. M. Nagle
L. E. Olds
F. D. Payne
P. Schaaf
P. H. Waidley

Era Yacht Club, Coney Island, N. Y.

Frank L. Anderson Carl Anderson Carl Anderson
Norman Anderson
W. H. N. Bostlemann
Richard Burke
J. McManus, Jr.
Dr. T. F. Patterson
Robert W. Rudolff
W. T. Stewart
Harold Townsend

Eureka Yacht Club, Newark, N. J. Carnot M. Ward

Everett Motor Boat Club, Everett, Wash.

C. E. Ritchie Charles Stone E. J. Lundegard, Carpenter

Farragut Sportsmen's
Association, Camden, N. J.
M. F. Casselman
Geo, J. Fuss
Louis Golden
Thos. Hammett
J. Jansen
Arthur F. Kaer
Chris. Lloyd
Henry M. Neeley
H. T. Voegele

Flat Rock Motor Boat Club, Harriman, Penna.

Eral Harlan, Engineer Genesee Dinghy Club, Rochester, N. Y.

Clarence Ball Frank M. Schultz

Gravesend Bay Yacht Club, Brooklyn, N. Y.

Brooklyn, N. Y.
Jos. G. Breaznell, Ensign
John Kenneth Birch, Ensign
Wm. T. Flannery, Yeoman
Fred. K. Gentes
George Harr, Warrant Boatswain
Walter Jacobson, Yeoman
Harold D. A. Martin
Arthur A. Nelson

Halifax River Yacht Club, Daytona, Fla.

John A. Rodgers, Ensign

(Honor Roll continued on page 58)

Now Naval Reservists-Formerly Yachtsmen

J. G.

lub,

ain



(Continued from page 56)

Hampton Roads Yacht Club, Norfolk, Va.

T. R. Jones Chas. McDermott, Jr. H. O. McLean

Harlem Yacht Club, City Island, N. Y.

Geo. L. Bergen Gordon Bracken, Jr. Langley Hawthorne, Ensign Chas. J. Muhlfeld Geo. W. Young, Ensign

Haverhill Yacht Club, Haverhill, Mass. Allen F. Abbott, Chief Carpenter's Mate Edward Donahue, Chief Engineer's Mate

Hempstead Harbor Yacht Club, Glen Cove, L. I., N. Y.

J. L. Appleby Edward Donaldson A. W. Hisks J. S. Morgan

Hingham Yacht Club, Hingham, Mass.

Wm. L. Barnard, Lieut. Ralph W. Leigh Pierce Long, Ensign Eliot S. Mildram J. Dennis McKay John Thomas, Ensign

Horse Shoe Harbor Yacht Club, Larchmont, N. Y.

Club, Larchmont, N. Y.
Andrew Baxter, Jr.
W. E. Ferguson
Richard O. H. Hell, Ensign
Chas. C. Harrison
Harold Harrison
Robert R. Martin
John McClintock
Dr. Wm. B. Short
Kenneth Spence
Howard B. Spencer
E. H. Towle
Geo. A. Wells
Lyons E. Wakeman

Hudson River Yacht Club, New York, N. Y.

New York, I
L. Baum
Emil Fritschy
A. J. Field
Edw. Grols
Geo. Hoertel
Wm. Jones
Homer MacFail
C. L. McIntyre
R. H. Perkina
W. J. Sillery
Col. E. H. Snyder
C. H. Woldenberg
R. F. Wakefield
C. Zern

Huguenet Yacht Club, New Rochelle, N. Y.

John F. Mahlstedt Hobart W. R. Wheller James H. Woodward Gustav E. Vigoroux

Huntington Yacht Club, Halesite, L. I.

Wallace M. Brown, Quartermaster Morris E. Kinnan Harold Smith, Lieut. 1st Class George Taylor, Lieut. 1st Class

Indian Harbor Yacht Club,
Greenwich, Conn.

Ralph E. Brush, Lieut. J. G.
George R. Duryea, Lieut.
Leonard H. Dyer, Lieut.
H. Rumsey Green, Ensign
J. R. Johnson, Ensign
John W. Masury, Ensign
Robert Maynicks, Engineer
Henry Outwater, Coxswain
Francis S. Page, Lieut.
H. Wilbur Paret, Jr., 1st Lieut.
Robert N. Tod, Lleut-Com.
William B. Tubby, Jr., Ensign
Loring Washburn, Lieut.

Island City Boating Association, Rock Island, Ill. George Stuart Bradley

Jackson Park Yacht Club, Chicago, Ill.

H. P. Benedict
A. A. Bennett
C. A. Boughner
C. M. Briggs
Ray Carpenter
W. J. Clements
J. F. Connell
E. C. Cowen
Roberts Elmers
Vern E. Farrell
C. M. Green
Charles John
E. B. Kinsloe
Art R. Larson
J. I. McKimm
Bill McGimsie
J. F. Malecek
Howard Neal
Claire Olsen
James O'Rourke
John O'Rourke
John O'Rourke
S. C. Parker
Warren Peasley
E. A. Peck
Al. Peterson
H. F. Peterson
H. F. Peterson
H. A. Redmon
M. J. Slaney
E. Thorsen
S. A. Williamson
Gordon Williamson
F. S. Young
C. F. Zekind

Ketewomoke Yacht Club, Huntington, L. I.

Huntington,
James H. Cooke
Fred. Farnsworth
August H. Galow
Frank H. Johnson
Alden S. Ott
James W. Ott
James C. Pinkerton
Geo. T. Pullen
Wm. F. Robbins
LeRoy Till
James Young

Keystone Yacht Club, Tacony, Pa,

Maurice G. Belknap Dr. Clarence S. Steigerwald

Kingston Yacht Club, Kingston, Ont.

Carroll Ashby, C. P. O. Augustus Calvin, Lieut. Collamer Calvin, Lieut. Robert G. Richardson, Lieut.

Knickerbocker Yacht Club, New York City

Ralph E. Dusinberre, Lieut. Jos. V. Gallagher, Chief Boat-swain's Mate Morgan L. Hotchkiss, Ensign

Lake Butte Des Morts Club, Oshkosh, Wis.

John Buckstaff Arthur Chapma

Lake George Regatta Association, Hague-on-Lake-George, N. Y.

Frederick G. Peabody George C. Reis

Lavallette Yacht Club, Lavallette, N. J.

Lavallette, N. J.
John G. Alley
C. A. Baudouine
Albert N. Billings
W. E. Ferguson
Clifford R. Hendrix
Adrian Iselin, II.
M. C. Jenkins
Pembroke Jones, Jr.
J. F. Mahlstedt
Henry B. Plant
E. H. Prentice
Harold Wesson

Larchmont Yacht Club, Larchmont, N. Y.

Walter A. Bell Robert W. Crozier Geo. W. Hatser Edward L. Merritt

Lincoln Park Yacht Club,
Chicago, III.

E. W. Brocki, Ensign
W. A. Dechent
T. R. Evers, Ensign
Thos. J. Farley
Adolph Floreen
Carl O. Hase
Leory H. Hagen
Dr. Hall F. Huber
Richard G. Jones
A. L. Koefoot
B. F. Lutz
Odgen T. McClurg, Lieut-Com.
William H. Murphy
H. P. O'Connell
John Pedgrfft
Conrad Pistorius
R. W. Ransom
G. W. Reynolds
Lynn R. Rutter
Rudolph Sampson
Thomas L. Stitt
John Vickery
Frank Weisgerber
Byron H. Willis

Lloyd's Harbor Yacht Clui

Lloyd's Harbor Yacht Club, New York City Wallace M. Brown, Lieut. Herbert L. Stone

Los Angeles Motor Boat
Club, Los Angeles, Calif.
E. R. Abbott, Chief Yeo.
C. H. Castle, Lieut.
John V. Eliot, Machinist's Mate
C. W. Follette, Seaman 2d Class
G. T. Garland, Mach. Mate, 2d Cl.
J. P. Gilmer
H. R. Johnstone, Lieut.
C. L. North, Seaman, 2d Class
Eugene Overton, Lieut. Com.
Edward A. Salisbury, Lieut. J. G.
Edward J. Walter, Coxswain

Lowell Motor Boat Club, Lowell, Mass. Harry Flech

Lynn Yacht Club, Lynn, Mass. B. F. Cogswell A. J. McKenzie G. Frank Newhall Harold T. Winship

McMullen Yacht Club, South Norwalk, Conn.

William A. Cowing Hamilton Comtsock Fred. Larson Harry Oblander William A. Reis

Manasquan River Yacht Club, Newark, N. J.

Arthur G. Donnelly Bradley Fischer Robert P. Higgins

Manchester Yacht Club, Manchester, Mass.

Manchester Yacht C
Manchester, Mass
Reed P. Anthony
Dr. F. G. Balch
Godfrey L. Cabot
Thomas D. Cabot
Francis T. Colby
Charles E. Cotting, Jr.
Charles K. Cummings
Charles F. Curtis
William Dexter
Amory Eliot
Everett Fabyan
Regimald Foster
A. Henry Higginson
Charles E. Hodges, Jr.
John Amory Jeffres
Ammie W. Lancashire
Guy Lowell
L. Mortimer Pratt, Jr.
Roger L. Putnam
John Reece
Robert M. Recce
Herbert M. Sears
Frank Wigglesworth
Norton Wigglesworth
Norton Wigglesworth
Norton Wigglesworth
Norton Wigglesworth
Norton Wigglesworth
Richard B. Wigglesworth

Manhasset Bay Yacht Club, Long Island

H. A. Alker, Petty Officer C. J. Lincoln, Chief Petty Officer W. G. Newman, Petty Officer Ralph Pulitær, Ensign P. L. Reinhardt, Lieut.

F. L. Richards, Ensign John Philip Sousa, Lieut, H. P. Wells, Lieut,

Mantoloking Yacht Club, Mantoloking, N. J.

Mantoloking, N. J.
Louis Bayard
Cornelius Boocock
Harry B. Cox
Delavan Downer
F. Shelton Farr
H. Barton Farr
Francis H. Geer
Theodore Hunt
Austin Meigs
Stephen J. Meeker
C. Randolph Runyon, Jr.

Mattituck Yacht Club, Inc., Mattituck, N. Y.

Mattituck,
Otto Dreher
Stewart Haggerty
Harold Hudson
Frank McMillen
LeRoy S. Reeve
Walter Silkworth
John Sturgess
George G. Tuthill
Ralph Tuthill
Raymond Tuthill
Raymond Wickham

Memphremagog Yacht Club, Newport, Vt. Walter D. Kipp, Ensign

Meriden Motor Boat Club, Meriden, Conn. Barney Anderson Julius Parcault George Sokol

Metropolitan Yacht Club, New York City E. M. Jacobson Frederick Schanno

Middletown Yacht Club, Middletown, Conn. Joseph M. Dougherty R. P. Eaton James V. Girdley Samuel J. Starr Eugene H. Stemple, Jr. Harold A. Williams

Mill Creek Yacht Club, Flatlands Bay, L. I. Norman P. Hicks H. G. W. Schumm

Minnetonka Yacht Club, Minnetonka Yacht Club, Deephaven, Minn. Kenneth Hale Adams, Ensign Dewalt Hommer Ankeny Earle Frees Stanley Frees Heary Hill, Lieut. Kenneth B. Salisbury, Lieut. Harold Savage William Wagner

Moline Launch Club. Moline, Ill. Harry G. Good

Moosehead Lake Yacht Club,

Kineo, Me.
James K. Clark
Charles Martin Clark
Howard Rowland
Holcom York

Morris Yacht Club, Pelham Bay, N. Y. F. F. Addickes, Lieut. S. J. Lunger O. Holmgren

Mount Royal Yacht Club, Philadelphia, Pa. Harold Green Walter Myers Andrew Pflieger

Nahant Dory Club Richard D. Fay
S. E. Guild, Jr., Ensign
Henry R. Guild, Ensign
Charles F. Kemp, Captain

New Bedford Yacht Club, New Bedford, Mass. Milton E. Borden D. J. Brightman Douglass Bruce Elmer L. Deane, Ensign Ward DeWolf, Ensign

New Bedford Yacht Club, New Bedford, Mass. (Cont.)

New Bedford, Mass. (Cont.)
Benj. T. Dobson, Ensign
Charles O. Foster, Ensign
W. L. Hawes, Ensign
H. I. Jamieson
Curtis M. Pierce
H. Sistare, Lieut.
Edward M. Slocum, Lieut. J. G.
Arthur F. Spare
Otis C. Stanton
Clifford B. Terry
Clinton H. White, Ensign
Howard I. Wordell

Inc.,

Club

ub,

Club,

ıb.

ıb.

Newburgh Yacht Club, Newburgh, N. Y. William T. Cochran, Lieut. Com. George Morse, Chief Boatswain Joseph Rogers

New Haven Yacht Club, New Haven, Conn.

New Haven, Co
George D. Atwood
Robert G. Baird
Raiph L. Bishop
Traver Briscoe
Frank B. Cornwell
Osborne A. Day
Ralph T. Downs
Franklin Farrel, Jr.
William J. Hickey
James L. Hubbard
Joseph T. Kelley
Carleton L. Marsh
Charles A. Maynard
John K. Murphy
Clifford M. Peck
Raynham Townsend

New Rochelle Yacht Club, New Rochelle, N. Y.

New Kocheus,
Daniel Bacon
M. S. Bentham
George S. Bunk
Arthur J. Fealy
Milton R. Lowry
Cornelius Shields
W. Bruce Lockwood
Addison D. O'Neill
H. L. Stone

New We-Que-Tong Club, Traverse City, Mich.

Donald D. Bell L. K. Cleveland George H. Cross Richard A. Cross Frederick D. Curtis A. L. La Franier G. A. Holliday

New York Motor Boat Club, New York, N. Y.

Willis D. Davidge George M. Dickie Willis D. Davidge George M. Dickie E. L. Hardy William Hay Charles E. Healy Francis G. Healey George W. Hoertell Andrew J. McElhinney A. G. Rosberg A. J. Schwarzer Henry Stolzenberger R. A. Storey Harold C. Vaughan

Northport Yacht Club, Northport, L. I. Frank Ackerly, Coxswain Nath. M. Kerr, Ch. Mach. Mate John I. Van Iderstine Edward Van Iderstine Frank W. Morrell, Lieut. D. P. Morse, Jr., Captain

Norwalk Boat Club, Norwalk, Conn.

Jay S. Buckley, Yeoman H. A. Montgomery, Boats., 2d Cl. Geo. B. Montgomery, Yeo., 1st Cl.

Nyack Boat Club, Nyack, N. Y.

Howard Blauvelt, Ensign Edward Lapp C. W. Lawson, Captain Sherwood Perry Sylvester Ross Worthington Scott Whitney Sherman

Old Mill Yacht Club, Jamaica Bay, N. Y.

Henry C. Ammarell William C. Arelt Eugene Arelt, Jr. John J. Boland Frederick H. Bress

John A. Deringer
Andrew Faller
Edward Forgersen
Howard Gundermann
Eugene Herrmann
William H. James
Harry Jansen
Henry Kortebein
Albert J. McGrath
John C. Nichol
Harry Reimels
George L. Sillence
William F. Sommer
William G. Sniffin
Adolph F. Shortt
Paul Vonaux
John T. Young

Paul Vonaux
John T. Young
Oriental Yacht Club,
Mamaroneck, N. Y.
George W. Anthes
Charles H. Beckley
Frederick J. Bister
K. C. Brennecke
Aifred T. Brown
Dr. Swepson J. Brooks
Mary B. Brooks
Clarence J. Bull
John W. Chapman, III
Mervin Connor
H. C. Engle
G. G. Fry
G. G. Fry
G. G. Fry, Jr.
H. B. Gedney
John A. Haggerty
William Haggerty
William Haggerty
William P. Hardman
J. George Hollerith
Eugene F. Humphrey
L. J. Imperatori
John Henry Koffman
Curtis E. Lakeman
Rossiter Maurice
Pierce Mosser
O. H. Murray
George W. Nichols
Richard R. Savage
R. Clifford Simpson
Henry Lewis Slade
Alymer Thompson
George G. Throop
James Turner
James S. Whitman, Jr.
Frederick Wilson
Oshkoah Power Boat

Oshkosh, Wis.

Nile Behncke
Dr. C. J. Combs
J. H. Davidson
George Everhart
C. Foster
Louis Lothman
Dr. C. H. Nims
E. Pfotenhauer

Oshkosh Yacht Club,

Oshkosh, Wis. John D. Buckstaff, Ensign Arthur Chapman, Ensign

Peoria Yacht Club, Peoria, Ill.

Walter Conover
William T. Hallstein
Theodore C. Pegg
J. E. Schoch
George T. Watson

Pilgrim Yacht Club, Brooklyn, N. Y.

Louis Buscher George Coffin Charles S. Huson Matthew Locke Edward Moore Otto Trirbig

Pleasant Park Yacht Club, Winthrop, Mass.

Winthrop, Mac Edward Anderson Willard F. Elwell Charles E. Gunderson Walter J. Marsh S. A. Moulton John M. Rafferty Hugh White James White, Jr.

Plymouth Yacht Club, Plymouth, Mass. Alfred H. Mayland Lowney B. Thomas John H. Watson

Pt. Shirley Yacht Club, Winthrop, Mass.

George Baumeister David Dupee Ralph Goudy

James J. Grady Frank J. Isaac Joseph W. Jolly Willard L. Jones Harry McMahon Earl Murray

Point o'Woods Yacht Club, Fire Island Beach, L. I. John Barker Hyde

Ponus Yacht Club, Stamford, Conn.

Walter Berges
Theodore Bottomly
C. E. Finch
Frank Flynn
W. P. Frost, Lieut. Com.
Eugene Mays
James Wood

Pootatuck Yacht Club, Stratford, Conn.

Stratford, C.
F. A. Aufford
Merritt F. Axtell
F. S. Ayers
W. G. Bryant
Ansel Culver
Reginald Culver
Kenneth Fryer
Clarence Garner
Brunson Sammis
Ario Walker
John Nettleton

Portland Motor Boat Club, Portland, Ore.

Edward W. Ryan

Portsmouth Yacht Club, Portsmouth, N. H.

Fortsmouth, N. FI.
R. J. Boyd
A. H. Carrich, Chief Machinist
F. E. Harmon, Yeoman
W. Jenaschka, Lieut.
Otto Johnson, Lieut.
J. S. Jones, Lieut.
V. F. Martin, Yeoman
R. Martin, Chief Yeoman
A. J. Pruett, Pay Clerk
R. R. Schlabach, Com. Navy Yard

Port Washington Yacht Club, Port Washington, N. Y.

Leonard H. Cross
Douglas Corry
Maurice Stephensen Gould, Ensign
Harry F. Guggenheim
Morgan L. Hotchkiss
Adrian Iselin II
David H. McCullough
H. N. Slater
William W. Trench, Ensign

Queen City Yacht Club, Seattle, Wash.

E. C. Anderson P. R. Bayne H. R. Langtry H. J. McKmiley Charles Neus W. W. Robinson Leo Sargent L. A. Thurlow C. A. Wheeler

Quincy Yacht Club, Quincy, Mass.

Quincy, Mass.

Arthur Adams
John B. Bass
Charles E. Bishop
John W. Charles
Raymond Coyle
Daniel H. Driscoll
Benjamin L. Duncan
R. Farquaharson
Laurence B. Ford
George W. Gavin
Charles A. Heffernan
William Jennings
Edwin Moller
L. B. Moller
J. T. Mulcahy
Harold C. Mullane
P. J. O'Brien
Henry A. Plett
Clark Saville
George W. Terry
James E. Timilty
Joseph F. Timilty
George L. Tupper
Victory M. Weil
Onissett Yacht Ch

Quissett Yacht Club, Quissett, Mass.

William Deitt David L. Whittemore Edward DeWitt, Jr., Ensign Henry Woodruff, Ensign

Raritan Yacht Club, Perth Amboy, N. J.

Louis Compton, Ensign William A. Compton, Ensign Raiph L. Crowell Runyon T. Giles John Hannon, Jr., Lieut. J. G. Howard Hardiman Clarence K. Liddle Samuel E. Mayo Charles M. Steele, Ensign Harold Van Syckle

Red Bank Yacht Club, Philadelphia, Pa. John F. Betz, 3rd Lieut.

Red Wing Yacht Club, Red Wing, Minn. William J. Ashton H. E. Greene

Rhode Island Yacht Club, Providence, R. I.

Providence, R. I.
D. R. Abbes
Louis A. Aremtz
B. L. Barnes, Chief Boats. Mate
Percy H. Brereton, Lieut.
John D. Burnham
Henry A. Conway
S. P. Conking, Lieut. J. G.
George Gray
Richard J. Higgins
Fritz Holmquist
Donald C. Mair, Ch. Boats. Mate
Walter W. Massie, Lieut.
George H. Nicholas
R. B. Noyes, Ensign
Ralph Pewey
LeRoy Irving Prince, Boatswain's
Mate
Harold D. Stone, Ensign
Frederick B. Thurber, Lieut.
Dr. George W. Van Benschoten
Frank H. Willington

Riverton Yacht Club.

Riverton Yacht Club, Riverton, N. J.

Riverton, N. J.
William H. Baker, Jr., Yeoman
Maurice G. Belkmap, Lieut,
Frank F. Boyd, Lieut,
Frank F. Boyd, Lieut,
Dale B. Fitler, Ensigm
Frederick M. Jones, C. P. O.
Robert K. Jones, Quartermaster
George E. Lawrence, Lieut,
Harold Leinan, C. P. O.
Ralph Light, Boatswain's Mate
Watson Mervine, Yeoman
Benedict Showell, Boats Mate
Joseph M. Watkins, Yeoman
Emerson Wolfschmidt, Boats. Mate

Robbins Reef Yacht Club, Bayonne, N. J. Amos Hasker, Lieut.

Rochester Yacht Club, Charlotte, N. Y.

H. A. Baumer Leslie A. Block Harry L. Glen William L. Glen Charles Van Voorhis

Rondout Yacht Club, Kingston Point, N. Y.

John N. Cordts John W. Crosby Kenneth Everett LeRoy Gill Harper Leeper Everett Schutt

Royal Hamilton Yacht Club, Hamilton, Ont.

Frank Perry John Ramsay

Royal Kennebeccasis Yacht Club, St. John, N. B. John Kimble

Royal Vancouver Yacht
Club, Vancouver, B. C.
J. Adamson
Irving H. B. Bell
W. K. Collister
C. W. Crofts
C. A. Davidson
A. W. Davidson
J. Green
F. W. Holland
H. St. C. Julett
C. O. Julian
A. J. Leckie
C. M. Mulch
(Honor Roll continued on

(Honor Roll continued on page 60)

Royal Vancouver Yacht Club, Vancouver, B. C.

Club, Vancouver, B (Continued) J. G. McCarter F. O. Mills W. E. B. Minchin O. S. Power B. D. Rogers H. Stone C. S. Thicke G. C. Van Horne G. B. Warren A. H. Weaver

Rumson Country Club, Rumson, N. J.

Rumson Country Clui
Rumson, N. J.
Howard Boulton
Harry I. Caesar
Thomas C. Clarke
William Crombie
Anthony Drexel, Jr.
Richard B. Duane
Henry Sage Dunning
James Radford English
Henry T. Fleimann
Prescott LeB. Gardner
Walter Dunn Gelshenen
Jay Gould
A. Mitchell Hall
Hugh Hartshorne, Jr.
Harry P. Hewes
Joseph C. Hoagland
James Imbrie
J. Ford Johnson, Jr.
Arthur Russell Jones
W. Strother Jones, Jr.
William S. Lawson, Jr.
William Barclay Parsons
Bernon S. Prentice
Charles M. Ramsdell
Latham R. Reed
Ralph Benjamin Romaine
Albert Spalding
William H. Symington
Kingsley Twining
Sivio Villa
William Carroll Wilson
Stanton Whitney
Charles M. Wolcott
Edward A. Gill Wylie
W. Gill Wylie
W. Gill Wylie
W. Gill Wylie
Schem's Head Yacht

Sachem's Head Yacht Club, Sachem's Head, Conn. Chas. Lee Andrews, Jr., Ensign Osborne A. Day, Lieut. William P. Frost, Lieut. John J. Phelps, Lieut. Etton S. Wayland, Ensign

Saco Yacht Club, Saco, Me.

Fred. Blow, Quartermaster, 2d Cl. Varney Harrison

Variety Harrison
Salem Rod, Gun and Yacht
Club, Salem, N. J.
John W. Ewen
David H. Fogg
Luther Hofman
Leonard Murphy
John Pancoast

Salters Point Yacht Club, South Dartmouth, Mass.

Marion S. Ackerman, Jr. Warren Ackerman Wilson Stearly Kenneth G. White Guy White

San Francisco Yacht Club,
Sausalito, Calif.
Richard M. Cantwell
Harold S. Doulton
C. Willard Evans
Henry St. L. Farnsworth
Arthur W. Ford
Edward Gillette
I. B. Lowe
F. Somers Peterson
S. B. Todd, Jr.
Chas. S. Turpin

Savin Hill Yacht Club,
Dorchester, Mass.
Frank F. Cincotta
George F. Flynn
Chas. A. Hall
Richard Harmoth
John H. Holler
Walter M. Jemberg
Arthur Jemberg
W. J. Killoran
J. S. Long
Douglas E. Munro

David R. Munro George A. Nelson J. Francis Rich Russell Rose Ray H. Roswell Laurence Washbur

Schenectady Boat Club, Schenectady, N. Y.

Schenectady, N. Y.
S. W. Armstrong, Lieut.
W. H. Hamilton, Ensign
E. J. Harbison, Ensign
H. H. Johnson, Hospital Corps
J. J. Lamberty, Ensign
W. C. Mann, Lieut.
H. M. Payne
M. R. Pratt
G. L. Putnam
C. L. Turner, Lieut.
W. S. Viall, Elec. Sergt.

Sea Cliff Yacht Club, Sea Cliff, L. I.

Sea Cliff, L. I.
Percy Allwork
Fred W. Boschen, Jr.
Horace Berner
Lester Cook
John D. Cosgrove
Frederick Chellborg
Wm. Church
Wilbur Frerichs
Henry A. Hollmann
Wm. E. Lundgren
Leonard S. Norris
Winfield Norris
Chas. A. Porter
Oswald Rehbein
R. T. Stevenson
Geo. F. Stevenson
Harold Vandenhove
Norman Weir

Seattle Yacht Club, Seattle, Wash.

Seattle, Wash.
Miller Freeman
George Gandy, Lieut., J. G.
L. E. Geary, N. A.
J. S. Gibson, Captain
Fritz Hellenthal
R. N. Morris, Lieut J. G.
Dietrich Schmidt
Hellmuth Schmidt

Sewaren Motor Boat Club, Sewaren, N. J.

John T. Cummings J. Russell Fick Walter F. Zettlemoyer

Shattemuc Yacht & Canoe Club, Ossining, N. Y.

Benjamin A. Acker, Ennign A. Rivers Genet, Lieut. Amos O. Squire, Lieut. Howard N. Wilcox, Ennign William G. Wood, Chief Yeoman J. Durbin S. Wood, Chief Quar-termater termaster H. Byington, Chief Yeoman C. Howard Cotton

Sheepshead Bay Yacht Club, Sheepshead Bay, N. Y.

C. L. Benton Geo. E. Haines Geo. W. Matheson John J. Monahan Otto E. von Au

Shelter Island Yacht Club, Shelter Island Heights, N. Y. John W. Webber, Jr.

South Bay Yacht Club, Alviso, Calif.

Alviso, C
Frank Cox
C. R. Gaston
Geo. Graham
C. H. Keaton
Owen McGregor
A. L. Rhodes
G. B. Richmond
H. Le Roy
M. L. Smith
R. G. Wilkins
W. L. Wright

South Coast Yacht Club, San Pedro, Calif.

Morgan O. Adams W. W. Bailey

H. E. Barden
Wilbur Bassett
Thos. Beyrle
Wm. H. Bloeser
Fred H. Bosbyshell
C. J. Case
Frank T. Cass
Vernon C. Chamberlain
Jas. H. Dodson, Jr.
Dr. J. Park Dougall
A. L. Gilks
Clement Hebeler
Rex C. Hubbell
Chas. R. Kierluff
Edward K. Lang
John D. Knight
John N. Jeffries
Hugo R. Johnstone
Geo. A. Laubersheimer
David E. Lee
Clarence M. Neuner
Eugene Overton
Harry C. Reed
H. L. Rider
Eugene Ross
Jerome W. Shilling H. L. Rider Eugene Ross Jerome W. Shilling Robert R. Snodgrass Dr. Albert Soiland Ellis W. Taylor Chandler P. Ward Henry B. Warren Howard Wright Warren D. Wood Thos. Zabriskie

South Boston Yacht Club,
Boston, Mass.

Herman Aaron, Water Tender
Edward F. Allen, Ensign
Leon T. Allen, Bostawain's Mate
Joseph Callahan, Ensign
Walter Callahan, Lieut.
Chester R. Clark, Ensign
Francis H. Corrigan, Chief Gunner's Mate
Theo. J. Crawford, Warrant Officer ner's mate
Theo. J. Crawford, Warrant Officer
Herbert B. Donovan
Geo. A. Erhart
James V. Farrell, Machinist's
Mate
Ralph B. Green, Ensign
Albert F. Harland
H. C. Harris, Ensign
Geo. L. Heyer, Ensign
Martin T. Lee, Paymaster
Robert E. Lee, Printer
A. J. Lynch, Coxawain
Alexander MacLachlan
Hugh MacLachlan, Carpenter
J. W. McConnell, Chief Commissary
Steward
Thos. J. McMahon, Lieut.
J. F. McNamara
Carl J. Meissner, Merchant Marine Carl J. Actioner, rine Wm. A. Moran, Electrician Leo Pistorino, Merchant Marine Wm. A. Ratigan, Lieut. Senior Grade Roy G. Shaw R. J. Sheering, First Class En-

South Shore Yacht Club, Chicago, Ill.

gineer H. C. Shepherd, Ensign Edward Sherlock, Lieut. Com-mander

Earl C. Eisner
Karl P. Frazier
Geo. A. Jeffers
John McIllreevy
Emmet N. Parker
E. G. Swanson

South Shore Yacht Club, Freeport, L. I.

Freeport, L. J.
T. Blue
Lloyd R. Cutler
Stanley Hart
John R. Hill
Fred. Hewlett
O. W. Humphrey
Lewis W. Martin
Arthur D. Nosworthy
Burges Osterhout
Wilson G. Southard
Clinton M. Story
John J. Taylor
Perry J. Wilson

Squantum Yacht Club, Wollaston, Mass.

Wollaston, N G. Lawrence Bean Ralph H. Hendrix H. B. Johnson G. F. Newburgh H. W. Newey R. B. Packard S. W. Doring James McDonald

Stamford Yacht Club, Stamford, Conn.

Stamford, Conn.
R. G. Bigelow, Easign
A. M. Billings
E. P. Corning, Ensign
Gayer G. Dominick, Lieut.
Ernest G. Draper, Lieut.
W. P. Frost, Lieut.
Alfred Hague, N. A.
E. P. Jessop, Capt.
H. S. Neilson, Capt.
D. P. Plat.
W. L. Sawyer, Capt.
S. Merritt Skelding, Lieut.
G. R. Venable, Pay Inspector

Staten Island Yacht Club, Stapleton, N. Y.

Frank Kehoe, Transport Service Fred. Muller, Supply Office Geo. L. Nelson, Salvage Department Chas. G. Wilcox

Stuyvesant Yacht Club, Pelham Bay Park, N. Y.

Pelham Bay Pa A. H. Ackerman W. E. Bell A. Ehrhardt W. F. Goodnow H. Gutmann W. A. Hansen W. Karl A. G. Kirchner Geo. W. Lawson W. P. Purdy H. G. Scholz

Tappan Zee Yacht Club, Grand View-on-Hudson, N. Y.

Arthur Haas Orient C. Pickney, Ensign Worthington Scott Peter Street

Thousand Islands Yacht Club, N. Y.

Club, N. Y.
Francis E. Brigham, 1st Lieut.
Alson S. Clark, Ensign
John Englis, 2nd, Ensign
Geo. S. Hasbrouck
J. Harold Hayden
C. Allen Hayden
Grant A. Peacock
R. B. Peacock
Claire Peacock
J. K. L. Ross, Commander
Henry James Wiser, Flight Capt.
John Philip Wiser, Lieut.

Toledo Power Boat Club, Toledo, O.

Jack Aldrigh Geo. Degenhart C. J. Nidhardt

Tower Ridge Yacht Club, Hastings-on-Hudson, N. Y.

Frank Doerfler, Yeoman John Hurley Joseph McKenna Raymond R. Poe Leo Sullivan Otis Peabody Swift, Ensign Sherman Thursby Theo. H. Wilde

Unqua Corinthian Yacht Club, Amityville, N. Y. Wm. R. Albertson C. M. Lawson, Jr. Frederick H. Wells

Washington Park Yacht Club, Providence, R. I.

Earl W. Adams Arthur W. Blis Kenneth O. Bliss Joseph Dimsey, Warrant Engineer Henry Gerber, Coxswain

Waucoma Yacht Club, New Haven, Conn.

James P. Crum Charles Kelly Harold Werle

Weetamoe Yacht Club, Fall River, Mass.

Frank Carroll
James Carroll
William Comboy
Thomas Clynes
James Lee
Frank Sbakeshaft
Wm. Waldron

(Honor Roll continued on-

American Chasers Destroy an Austrian Base

By Louis Guillaud

URING the whole course of our own participation in the war there was but one opportunity in which the American Submarine Chasers were engaged in a real naval operation against warships and shore batteries at the same time. This was in the raid on Durazzo, the strong Austrian Naval base in the Adriatic, and it was in this particular operation that the little craft were tried out sufficiently to satisfy their most strenuous critics. That they came through this engagement with colors literally and figuratively flying was no surprise to those who con-ceived and built them, but it was a surprise to many old line naval officers and to some laymen.

The first official, and therefore absolutely authentic, story of the part that eleven of these chasers, part of the fleet of Captain C. P. Nelson, N. S. N., based at Corfu, Greece, played at Durazzo was made public by the Navy Department in Washington only the other day and from it we learn that the British Force Commander in a dispatch forwarded through the British Admiralty to Admiral Sims

praised their work in the following words:

'I am most grateful for the valuable service rendered by twelve submarine chasers under Captain Nelson, U. S. N., and Lieutenant Commander Bastedo, U. S. N., which I took the liberty of employing in an operation against Durazzo on October 2. They screened heavy ships during the bombardments under enemy fire; also apparently destroyed defi-nitely one submarine which torpedoed H. M. S. Weymouth, and damaged and probably destroyed another submarine.

"During the return voyage they assisted in screening H. M. S. Weymouth and in escorting an enemy hospital ship which was being brought in for examination. Their conduct throughout was beyond praise. They all returned safely without casualties. They thoroughly enjoyed themselves."

selves.

Capt.

ineer

Imagine, if you can, that last sentence. "They thoroughly enjoyed themselves." I know of no phrase coined in the whole period of the great conflict that more aptly describes the way in which American jack tars go into the The bigger the fight the more enjoyment they find in it, and the only grumbling to be heard in this man's navy has been from those boys who either did not get across at all, or who, having reached the other side, were unable to ever get within sight or in touch with an enemy craft or

land battery.

But the British commander was not alone in showering praise upon our boys on the chasers, for Admiral Sims also received another dispatch coming from the Italian

Admiralty in Rome. Said this communication:
"The Italian Naval General Staff expresses highest appreciation of useful and efficient work performed by United States chasers in protecting major naval vessels during action against Durazzo; also vivid admiration of their clever operations which resulted in sinking two enemy submarines.

Again has the American naval officer and sailor, be he regular or reservist, been typified. For in the dispatch from the Italian Admiralty the phrase, "vivid admiration for their clever operations," describes the manner in which all American naval vessels have been handled in every war in which this country has fought and particu-larly the handling of these little chasers. All of those who took part in the operations had sailed their craft through the thousands of miles of water that separated the little old U. S. A. from the Naval Base at Corfu. In the fleet that participated in this attack were the Chasers Nos. 95, 128, 129, 130, 179, 215, 225, 324, 327, and 337. The No. 224 has also been ordered from Corfu to participate, but in leaving port fouled her propeller and was unable to proceed

The work assigned to the chasers was primarily that of screening the larger vessels and they were divided into four groups for that purpose. Three groups of three each and one group of two, owing to the accident of the No. Of the operations of the British and Italian fleet we are not much concerned and it is with the work of the

chasers that I shall confine myself.

Of the submarines destroyed one was sunk by two of the chasers and the other by a disabled chaser, which at the time was undergoing repairs to her engines. were sunk within a few minutes of each other and both by the same unit of chasers, which included the S. C. 128, S. C. 129, and S. C. 215. The S. C. 129 was the rear ship in the column when she sighted a periscope and immediately sheered to port. Aboard the S. C. 215 the impression immediately prevailed that their sister ship had sighted an underseas craft and the S. C. 215 also sheered to port. Then it was that the S. C. 129 reported by signal that her engines were out of commission, but shortly afterward also reported sighting a submarine. But in the meantime the S. C. 215 had really sighted a U-boat and at 10:30 opened fire with her 3-inch gun and port machine gun. The periscope was plainly visible and the gunners who had been waiting for this opportunity began blazing away. On their second fire their shell exploded just a few feet short of the periscope and shattered it completely. A column of air and water went shooting up, as when one of the chasers had accidently rammed the periscope of an Italian sub-marine in manouvers some time previously and the same thing occurred, so both Commanding Officer and Executive Officer of the S. C. 215 concluded that the periscope had

The submarine now turned sharply to starboard heading The submarine now turned sharply to starboard heading toward the British light cruisers then about two miles away. The S. C. 215 and the S. C. 128 began zigzagging around the submersible dropping depth charges, slipping over six in all. They were set for fifty feet and to quote the Navy Department, "functioned perfectly." Charges were also fired by the S. C. 215 from her "Y" gun and it was from one of these that the Hun craft got her finishing touch. Some of the wreckage of the craft came to the surface and was sighted by the Executive Officer and some of the members of the crew of the S. C. 215. The S. C. 128 was also extremely busy and when four depth bombs 128 was also extremely busy and when four depth bombs had been dropped over members of her crew also saw wreckage rising to the surface. This was followed by large globules of dark heavy oil.

Aboard the S. C. 129 things had been happening too. One U-boat had been sighted when she sheered off her course, but before the chaser could get into action against it another was sighted. Both were headed apparently toward the bombarding squadron for their course was generally southerly. At this time the submarines were traveling at about six knots.

Dropping over a pattern of depth charges the S. C. 129 had dropped three within a short radius of the German, all believed to be within effective damage range, when she finally passed directly over where the pirate craft was believed to be. Then a fourth charge was dropped. Another bomb was hove over and it was at this juncture that the engine trouble developed, causing a diminution of her speed. Three more charges were put over, all of them except the last one being set for 50 feet and the last at 150 feet. Coming about now the S. C. 129, returned to the area she had been bombing to find bubbles rising and a thick brown oil covering the surface of the water. Four minutes only was required from the time that the first charge was set over until the chaser had dropped the entire eight and returned to the spot where the U-boat was believed to have been destroyed, and just as the S. C. 129 reached this place a circle of white bubbly water rose to the surface and lasting for about a half a minute, then

The commander of the S. C. 129 was so positive that he had destroyed the German craft that when the S. C. 128 and the S. C. 215 came up to render him assistance he hoisted a signal that she had sunk a submarine. The sister-ships kept up their search for further U-boats while the S. C. 129 continued her repairs to her engines and when the attacking squadron of Allied ships turned and headed back for the Italian base at Brindisi, the three chasers headed back with the fleet.

National Association Votes "No Motor Boat Show This Year"

Lack of Time to Prepare Boats and Engines for Exhibition Purposes and Inability to Secure Proper Exhibition Building Are Deciding Factors

By Ira Hand

THE meeting of the Executive Committee of the National Association of Engine and Boat Manufacturers, held Friday evening, January 10, last, at the office of the association, 29 West 39 St., New York City, was again well attended, the following members being present: Henry R. Sutphen, of the Elco Wks., Bayonne, N. J.; John J. Amory, Gas Engine & Power Co. and Charles L. Seabury & Co., Cons., Morris Heights, N. Y.; Charles A. Criqui, Sterling Engine Co., Buffalo, N. Y.; James Craig, James Craig Engine & Machine Wks., Jersey City, N. J.; H. H. Brautigam, Bridgeport Motor Co., Inc., Bridgeport, Conn.; George F. Lawley, George Lawley & Son Corp., Neponset, Mass.; W. C. Morehead, Great Lakes Boat Bldg. Corp., Milwaukee, Wis.; A. E. Robinson, Regal Gasoline Engine Co., Coldwater, Mich.; A. W. Toppan, Toppan Boat Mfg. Co., Medford, Mass.; Joseph Van Blerck, Van Blerck Motor Co., Monroe, Mich.

After the routine business of the committee had been cared for, the members devoted the balance of the session to discussion of the Revenue Act now pending before Congress and to the matter of holding a National Motor Boat Show in New York City this season. While the Revenue Act of 1918 has not yet become a law, the opinion was expressed by the manufacturers present at the meeting that little or nothing would be done by the present Congress to relieve the conditions to be imposed upon the industry and the yachtsmen of this country by the provisions of this bill that relate to the building and use of yachts and motor boats. The efforts of the members will not be relaxed, however, in their attempts to have these provisions either eliminated or considerably modified and every effort will be made by the Association to co-operate with the American Power Boat Association and others who may be interested in the objectionable features of this bill that directly affect the immediate future of the industry and the sport—these efforts not to be relaxed until the last chance for any change may have been removed by the final passage of the bill

Following the last meeting of the Executive Committee on December 12, a questionnaire was forwarded each member of the Association asking his views with regard to the holding of a National Motor Boat Show this season and requesting him to indicate to what extent he would sup-port such a show if one were to be held. The replies that had been received were reviewed by the Executive Com-mittee and it was found that the members were about equally divided in their opinion as to the advisability of putting on an exhibition in the forepart of 1919. This being the case it became necessary for the Committee to place its final judgment on the proposition and, after much discussion and careful consideration of all sides of the proposition, it was unanimously decided that no National Motor Boat Show was unanimously decided that no National Motor Boat Show be held this season. Aside from the opinions as expressed by members of the Association, a number of other factors were carefully weighed by the Committee. It was shown that the Grand Central Palace, due to its present use as a debarkation hospital for the Army, would not be available this year, and it was also learned that Madison Square Garden could not be obtained either for the period in which it had been thought it might be suitable to hold a show nor for the length of time that has in years past been found necessary for the staging of the exhibition. The possible use of one of the armories had been thoroughly investigated and they were either found unsuitable for the purpose or unavailable at the time when they might be wanted for the show. It was also found that many of our members could not have arranged for a suitable exhibit within the short space of time that might intervene between the announcement of dates and the actual opening of the show

and it was felt that even in normal times the holding of an exhibition in March or April would be at the height of what might be termed the last stages of the production season. The temporary disorganization of sales and advertising departments as well as the various production departments at such a time would, it was felt, be found to seriously interfere with work that might be under way at the time in the different plants. A well-founded fear was also expressed that the pending Revenue Bill, if finally passed in its present form, would undoubtedly hamper the builders in their efforts to rehabilitate their business upon a peace-time basis.

Everything considered, the Executive Committee felt that in its decision not to hold a show this season, it was properly conserving the best interests of the members of the National Association and, at the same time, protecting the entire industry. It was pointed out that considerable work lay before the Association at this time in the matter of existing conditions in freight and express transportation, as well as matters of legislation, standardization of products and other items of general interest that demanded immediate attention.

The employment bureau of the Association has been used to good advantage during the last few weeks by many of the discharged men of the service, particularly those who had been connected with some branch of the Navy. A personal investigation of each case has shown that many of these ex-naval men had previous to the war been in occupations entirely foreign to things marine. It is interesting to note that quite an appreciable number of these men have, through their short experience in the naval service, conceived a liking for the water and they show a disposition to want to take up marine work of some sort as a vocation. A number of these men have been placed in suitable positions through the medium of the office of the Association and the service of the employment bureau will be extended as conditions warrant.

Graphic Navigation

(Continued from page 19)

The signs and abbreviations used are standard. Get to know them.

I. C.—Index correction, for an error of the sextant itself, and also how to get apparent noon will be taken up later on.

Arguments used in this problem are used in succeeding problems. It will not be necessary to explain them again.

The form used is based upon correct theory and had best be followed for a time. When the process is understood, Table 46 in Bowditch may be used in lieu of the form. Whether the form or Table 46 be used, the same and all of the corrections will be applied.

Obs. Alt. 2 84° 30′ 00″—None h, 9 84° 38′ 45″

Dip. — 84° 30′ 00″

84° 30′ 00″

Dip. — 6′ 56″

Ref. — 6″

Par. + 01″

S. D. ± 15′ 46″
h, 9 84° 38′ 45″

War Service Record of American Yachtsmen and Motor Boatmen

(Continued from page 52)

this station until October 26, 1917, he was designated as a Naval Aviator and commissioned Ensign. Later he was attached to the Naval Air Station at Hampton Roads, Norfolk, Va., as Upkeep Officer and Patrol Pilot until September 16, 1918. Ensign Townsend was appointed Lieutenant, junior grade (Provisional), March 23, 1918. Transferred from Hampton Roads on September 23, 1918, to the Naval Experimental Station, at New London, Conn., for experimental duties in connection with seaplanes, he remained there until he was discharged from the service, December 14. On October 1, he had received his provisional appointment as a Lieutenant, (senior).

Seamen H. Aubrey Brewster

COMMODORE H. M. Brewster, of Bay Shore, L. I., has a son who is a chip of the old block in H. Aubrey Brewster. This lad, who was 20 years old, joined the Naval Reserve Force when war seemed imminent and when hostilities finally broke out was immediately called to duty. Having had experience as a yachtsman he was at once rated as a seaman, first class, and sent to the Brooklyn Navy Yard for training. Later he was ordered to a Coast Guard station where for ten months he was trained as a surfman.

When volunteers were asked for foreign service he was

When volunteers were asked for foreign service he was among the first to respond and was attached to the Army Transport Powhatan, then fitting out. In this vessel he served until the close of the period of fighting as a member of her gun crew. This ship made continuous trips to France with troops and stores. Young Brewster is contemplating entering the Merchant Marine when released from the Navy. He is a member

of the Bay Shore Yacht Club.

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Coxswain D. L. Whittemore

O'N the very day that the United States commenced hostilities against Germany D. L. Whittemore, of Newton, Mass., enlisted in the Navy and for over fourteen months he has been crossing and recrossing the Atlantic constantly passing through the submarine zone until the time the armistice was signed. The first two months of his service was spent as a part of the crew of the speed boat of Commandant Rush of the Boston Navy Yard. In June, 1917, he was transferred to the U. S. S. Bridge, which is a naval supply ship.

Promoted to the position of Coxswain of the Captain's gig, of the Bridge, he made numerous trips back and forth across the ocean on that vessel supplying the naval bases and the ships doing duty in foreign waters. In that time he has had many exciting experiences, frequently dodging or chasing submarines.

Lieut. Burton R. Miller

AS Lieutenant-Commander of the Boston Power Squadron, Burton R. Miller had already seen much peaceful service on the waters, and it was only natural that after he had enrolled in Class 4 of the Naval Reserve Force that he should be called into the service of the country when it was apparent that war was but a matter of days. His orders came April 2, 1917, and upon reporting to Commander R. D. Hasbrouck at Boston he was commissioned as a Lieutenant, junior grade, and appointed an aide to the Commander. The coast patrol in and around Boston was placed under his command and later he was made Executive Officer of the Boston Section, Coast Patrol, First Naval District. He remained in this assignment until August 1, 1918, when he was assigned as Section Commander to the Provincetown Section, of the First Naval District.

As commander of that Section he remained on duty until that base was abandoned in January, 1919. Lieutenant Miller is at the present time a member of the Governing Board of the United States Power Squadrons, Incorporated, and is a member of the Corinthian Yacht Club of Marblehead, Mass.

Ensign Marsden Bayard Candler

HIS experience as an amateur yachtsman stood Ensign Marsden Bayard Candler, of the Naval Reserve Force, in good stead when he left Williams College to enter the Naval Reserve in April, 1917, and he was at once rated Chief Quartermaster. Ensign Candler, who resides at Short Hills, N. J., was born January 20, 1898, and is the son of Mr. and Mrs. Robert W. Candler. He graduated from Kent School and entered Williams College in 1916. While he was still at

the naval station at Newport, R. I., where he had enlisted, he became ill and spent some time in the Naval Hospital.

Later, he was detailed to Woods Hole and then placed in charge of the Island of Marthas Vineyard, with headquarters at Vineyard Haven. Here his inborn tact stood him in good stead, as it required considerable diplomacy to handle the situations that arose from the shipping problems constantly occurring. From the Island he went to the Officers' Training School at Newport, and upon graduation was commissioned Ensign. Duty as executive officer of a submarine chaser followed, and after some months of this service he was ordered to foreign waters, having a rough passage until the Azores were reached. He was still abroad some time after the signing of the armistice. He is a member of the Edgartown Yacht Club and of the Delta Psi.

Lieut. S. H. Parsons

Because of his standing as a Mechanical Engineer, S. H. Parsons has been kept steadily on inspection duty, and was not able to get to sea. Mr. Parsons graduated from Brown University with the degree of Mechanical Engineer in 1914, and in 1915 was appointed an inspector of sounding and dredging for the War Department. Leaving the government service he associated himself with the Remington Arms Co. at Bridgeport, Conn., in 1916, as maintenance engineer. Shortly after the war broke out he was commissioned an Ensign in the Naval Reserve Force and attached to the Bureau of Ordnance at Washington. Later he was ordered to the Naval gun factory in the capital and then sent to Toledo and later to Syracuse at the plant of the Hammond Steel Company.

While in Toledo and Syracuse he had charge of the inspection of all Navy ordnance material, including cartridges, cases, shells, fuses, forgings, and miscellaneous small parts. In August, 1918, he was promoted to Lieutenant, junior grade.

For the past twelve years he has been a member of the Albany Yacht Club, at one time being one of the two official measurers appointed by the club to assign rating under the American Power Boat Association rules. He has owned several power boats and has done much cruising along the coast of Long Island and in southern waters.

Lieut. Bartlett Harwood

VARIED, is the best word to describe the experiences of Bartlett Harwood, Lieutenant, junior grade, of the Naval Reserve Force, who enlisted as a seaman, on July 9, 1917, and after a short period of training was assigned to the Sectional Patrol Apache. This craft was doing guard duty off the entrance to Boston Harbor. Although the work was strenuous, Seaman Harwood managed to find time to study for his "exams" and after these had been successfully passed he was commissioned an Ensign September 16, 1917, and sent to the Second Reserve Officers' Training School at Annapolis for sixteen weeks' training. After this period and another successful examination he was commissioned Ensign (Temporary) in the Regular Navy. This was on February 1, 1918. Ordered to the U. S. S. Calhoun, he served a short time there and was then ordered to Destroyer No. 85, under construction at Fore River, Mass. This boat was put in commission June 13.

A period at sea doing troop convoy work from New York to the point where the Eastern Escort took over the convoy followed, in which Ensign Harwood made three trips abroad. A hurricane which his vessel encountered off Bermuda September 15, gave the officers and crew some uneasy moments and caused damage that laid the boat up in the Navy Yard for two months for repairs. In the meantime he had been commissioned Lieutenant, junior grade, July 1. His ship saw one submarine about 9,000 yards away and immediately attacked, but with no evidence of success. His resignation was accepted December 7, and he received his discharge December 15, and is back at his

home in Boston.

Electrician Sumner B. Young

As an amateur radio electrician Sumner B. Young, of Duxbury, Mass., had been interested in the bigger ships and particularly the Navy, even when as a member of the Duxbury Yacht Club he used to "just sort of sail around," and it was no surprise to his friends, therefore, when on February 24, 1917, he enrolled in Class No. 4 of the Naval Reserve Force. He believed very thoroughly in preparedness and was already

War Service Record of American Yachtsmen and Motor Boatmen

doing his part in preparing himself against the time when his country should call on him. At the time he enrolled he was

rated as Electrician, second class, radio.

When the war broke out he was among the first called to duty, and on April 12, 1917, he left Harvard while in his Freshman year to serve. He was only eighteen years of age. He saw active service along the American coast on a submarine chaser during the summer and fall of 1917 and spring and summer of 1918, especially during the time when the German U-boat raiders were off our coast. On October 1, 1917, he was rated Electrician, first class, with which rank he was discharged to resume his studies at Harvard.

Chief Engineer John C. Reid

So anxious was Lieutenant John C. Reid of 682 East Second St., Brooklyn, to get into the St., Brooklyn, to get into the great conflict that he could not wait for the United States to enter hostilities but enrolled in the Naval Reserve Force, April 2, 1917, four days before our actual participation in the war began. Lieutenant Reid, who is a member of the American Model Yacht Club, of Brooklyn, has already seen considerable experience on the water, and wishing to get into the thick of the fray volunteered for duty in European waters and was assigned to duty as Chief Engineer of the U. S. S. Margaret, a converted yacht.

After ten months' service in the war zone he was ordered home and attached to the U. S. S. Newburgh as Chief Engineer. This vessel, a 9,000-ton, oil-burning, turbine craft is in the Naval overseas transportation service. She was due to sail on

her maiden voyage about the middle of January.

Ensign John S. Hill

ORPEDOED on the U. S. S. President Lincoln, and then later sailing over almost the identical spot where the torpedoing had taken place was one of the experiences of Ensign John S. Hill, of Edgartown, Mass., who entered the Naval Reserve Force on April 30, 1917. He was first assigned to the harbor patrol at Boston, and on November 12 was transferred to the Auxiliary service. From November 14 to January 6 he made two trips to Beaumont, Texas, aboard the Standard Oil Company's steamship Rayo, as a part of his training cruises. January 28, 1918, he entered the Officers' Training School at Pelham Bay and less than two months later, March 23, was commissioned Ensign.

He was assigned to the President Lincoln on March 30, and after making two trips to France on that vessel was torpedoed May 31, arriving back in New York June 12. On August 27 he sailed for Europe on the Mauretania, and then it was that he passed almost within sight of the place of his previous adventure. Later he was stationed at Cardiff, Wales, on shore duty for five weeks and was then sent as Navigator to the

steamship Lake Blanchester.

Chief Machinist's Mate Albert J. Stadler

E landsman for machinist's mate in December, 1917, Albert J. Stadler was ordered to report for active duty May 6, He was sent to the Naval Air Station at Bay Shore, L. I., and after serving on the guard for two months was transferred to the engineering department, where he remained until the close of hostilities.

Due to a natural aptitude for mechanics, Mr. Stadler was rapidly promoted, until at the present time he is rated as a Chief Machinist's Mate, (Aviation). When on November 27 the Naval Air Station at Bay Shore closed its flying activities, Chief Machinist's Mate Stadler was ordered to Brunswick, Ga. Five of the machines in use at the Bay Shore station were flown

all the way to Brunswick.

In his final order closing the station Lieutenant Commander N. B. Chase, the commandant, paid a high tribute to Mr. Stadler and the others attached to the station, saying, "The work performed at this station during the past season has been superior to that of any other air station. The commanding officer wishes to thank and commend each officer and man for his excellent and loyal cooperation."

Boatswain's Mate Joseph T. Kelley

BEFORE he could complete his course in the Officers' Training School at Pelham Bay, Joseph T. Kelley, of New Haven, Conn., was released from active service on December 21, 1918. At the time he received his honorable discharge Mr. Kelley had been promoted to Boatswain's Mate, first class. Having taken a keen interest in nautical sports for a number of years, Mr. Kelley found no difficulty in winning promotion in the Naval Reserve Force, for although he was not called into active service until August 12, 1918, when he was sent to the training school at New Haven, his advancement was rapid.

Coxswain C. L. Benton

OTWITHSTANDING his earnest efforts to secure duty on the briny deep, C. I. Benton, of Brooklyn, N. Y., was unable to secure duty up to the time that the Armistice was signed. Enlisting on July 1, 1918, as a seaman, second class, Mr. Benton was not called into active service until August 1, when he was sent to the training station at New Haven, Conn. There he was promoted to the rating of Coxswain and was transerred from training station to training station without ever being able to get an assignment to a seagoing vessel.

Ensign Reed Pierce Anthony

O be called into active service in the Naval Reserve Force on the day that this country declared war and then to have the distinction of serving aboard one of the destroyen selected to accompany President Wilson's ship to France was the lucky lot of Reed Pierce Anthony, son of Mrs. H. A. Frothington, of 113 Commonwealth Ave., Boston, Mass.

Ensign Anthony was in Harvard College when it appeared that hostilities were imminent and becoming impatient he did not wait for the formal declaration, but on March 27, 1917, volunteered for the Naval Reserve Force. He was called out on the day war was declared and was on the Patrol Boat Shada from that time until November, 1917, when he was sent to the Cadet School at Harvard University. He graduated as Ensign three months after and was assigned to the Battleship New Jersey. From the New Jersey he was transferred to the Destroyer Lee, and this craft was one of the President's escorting fleet.

Quartermaster John F. Lally

MONG the exciting adventures of John F. Lally, Quarter-Amaster, first class, of 6 Lafayette Place, Yonkers, N. Y., was the rescue by his ship, the U. S. S. Sabalo, of the entire crew of the Coast Guard Cutter Mohawk, which had been rammed and sunk by a British merchant ship off Fire Island. Quartermaster Lally enlisted in the Naval Reserve Force on April 9, 1917, at the Brooklyn Navy Yard and until December, 1917, was engaged in convoy work on the Sabalo.

Transferred to the U. S. S. Mary Alice Quartermaster Lally was in charge of her signal bridge until July, 1918. This vessel was acting as guard ship at the entrance to New York harbor. After July the Mary Alice was detailed for submarine experi-mental work in the vicinity of New London and Bridgeport, Conn. Lally had another exciting experience and a narrow escape when the Mary Alice was rammed and sunk by one of Uncle Sam's latest submarines, the "O-13." After this young Lally was sent to Pelham Bay for later assignment.

Ensign William F. Lally

HREE days after the United States entered the war William F. Lally, of No. 6 Lafayette Place, Yonkers, N. Y., enlisted in the Naval Reserve Force at the Brooklyn Navy Yard and after much hard work was commissioned Ensign in December, 1917, after a period of intensive training at Pelham He was placed in command of Sectional Patrol No. 101 and the boat was ordered to New London, Conn. Here he remained for three months, when with seventeen other Chasers his vessel was ordered to European waters.

This mosquito fleet made the trip by way of Bermuda and the Azores and encountered severe weather nearly all of the way. Notwithstanding this, every boat in the little fleet com-

pleted the journey under her own power.

Owing to the enthusiastic response from the motor boatmen in service to our request for information as to their war record and due to the fact that so many of them are overseas which held up their replies until it was too late to get them into this issue of McToR BoatinG, we have been obliged to hold over until our March number a very considerable amount of interesting data which properly should have gone into our Victory Number.

Saving a Million Dollars for Motor Boatmen

Through the Efforts of Charles F. Chapman, Editor of MoToR BoatinG, a Change in the Revenue Bill Tax on Motor Boats Makes Pleasure Boating Possible During the Coming Season and Saves Boatmen Thousands of Dollars, Without Depriving the Government of Any Income

By Edward C. Wright

S this is written the presses which are printing this Victory Number of MoToR BOATING are running at full speed, but the order has gone out to bring them to a full stop. But why such countermanding orders when readers are anxiously awaiting their copies? Simply because such glorious news has just reached us from Washington that we must tell you at once why the fast approaching motor boat season of 1919 is assuredly to be the biggest

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A Committee of Congress has just reconsidered the motor boat tax provision of the new revenue bill and decided on a rate which will save the motor boatmen and yachtsmen of the country a full million of dollars during 1919. And no one will be the loser of a dollar, either, because it will mean fully 100,000 more boats in commission than would have otherwise been launched. Uncle Sam's treasury will contain exactly as much money at the end of the season as it would have with the prohibitive tax rate on motor boats, which had already passed the Senate and been approved by the Conference Committee. Boating will now be indulged in more universally everywhere, instead of being officially discouraged as appeared probable and likely up to a few

This news was conveyed to Mr. Chapman in the following telegram from Senator Calder:

DL284 41 Govt. ST WASHINGTON DC 533 P 22 CHAS. F. CHAPMAN EDITOR MOTOR BOATING 119 West 40th Street

New York City

CONFEREES HAVE JUST AGREED TO FIX BASIS OF TAX ON MOTOR BOATS ETCETERA ON NET TONNAGE. THIS IS JUST AS YOU WISHED IT.

WILLIAM M. CALDER

Probably very few yachtsmen knew about the tax on boats which had been decided upon. MoToR Boating noticed it in the new Revenue Tax Bill, a copy of which noticed it in the new Revenue Tax Bill, a copy of which we were able to secure a few weeks ago after many requests. We saw that it imposed a tax of a dollar a foot on practically all small boats and a much higher rate on larger boats. We immediately got busy, and we advised our friends to get busy with any Congressional influence they might have, and make an effort to have this unfair law changed. We wrote to Club officials and urged that they have their members get busy also. We stopped people on the street whom we knew should be interested. We pointed out to them the apparent joker which had creet into the out to them the apparent joker which had crept into the tax bill. We wrote numerous letters ourselves. But all the answers and replies which were received from Washington indicated that everyone was too late. The bill had passed the Senate, and the House Conference Committee had agreed to the Senate's provisions. All public hearings had closed. This left no hope that a change could be made, at least so all our Congressional friends wrote us.

But we knew it doesn't ever pay to say "Die." The motor boatmen's interests are our own interests. Many, many times we have stopped our own work to devote our entire energies to solving some problem which was bothering one

or a few motor boatmen. or a few motor boatmen.

Now was our chance. This time we would be working not for one or even a group of motor boat interests. We would be working for 100,000 boat owners and perhaps a million other persons who enjoy motor boats and yachting. We would be striving to keep the game and sport from being wiped off the seas for this year at least. Indirectly, we would be benefitting the trade and industry, and

the thousands of workers in the boat yards, engine shops and builders of equipment and accessories who would be thrown out of work should a prohibitive tax result in keeping many of the boats out of the water this year.

To get Congress or one of its most important committees

to reopen a matter that had already been decided in such a big job as the impending Revenue Bill isn't such an easy task. But it was our last hope and we were willing to take a chance.

We therefore told Mr. Chapman that it was up to him. "Go down to Washington," we told him, "and don't come back until you've started something." Now Chapman doesn't like Washington and hates calling on Senators or any one who can not talk boats. Furthermore, he had a date to take a trip out to sea on a submarine chaser, four

days hence, which he would rather lose a leg than miss.

Mr. Chapman was told before he went that public hearings had closed. The National Association of Engine and Boat Manufacturers had been told the same thing when

But not being particularly anxious to appear in public anyway, we believe Mr. Chapman was glad they had closed, for we heard him say something to Senator Calder of New York in Washington over the long-distance telephone about arranging a private hearing with each member of the Con-ference Committee. Senator Calder said this could be ar-ranged and that if Chapman would be in his office at ten o'clock Monday morning, he would see that he was properly

introduced to the various Congressmen.

Ten o'clock Monday morning saw Mr. Chapman quietly seated with Commodores Schmidt and Rauch of the Waterway League of America on a comfortable sofa in Senator Calder's office, awaiting developments. The Senator was ten minutes late. By that time, there were a dozen or so very important people waiting to see him. The spirits of the three yachtsmen were slowly ebbing as each new caller came in. What chance had they, was uppermost in their minds. When the Senator finally came in, he spoke a few words to each of the callers and one by one they left his officer, apparently their cases were dismissed. The Senator finally reached Mr. Chapman, who told him he had an ap-pointment with him to discuss the tax on small motor boats. The Senator remembered and ushered them into his private office. He told Mr. Chapman to start at the beginning and tell him everything, as he had never heard of a tax on motor boats. This appeared strange, as Senator Calder had been flooded with letters on the subject, but he dismissed the thought with a gesture toward a hill of correspondence, as high as a good-sized spar buoy, that he hadn't as yet

Mr. Chapman had prepared numerous charts and figures to show the number of boat owners and boats which would be affected and how a sport and industry would be set back many years, if not put out of business entirely. It was pointed out to Senator Calder that the tax bill as it passed the House had doubled the 1917 tax on all motor boats. This was bad enough; but when the measure came before

This was bad enough; but when the measure came before the Senate they not only doubled the 1917 tax, but added on an increase of from 200 to 500 percent on all motor boats between 21 and 45 feet in length.

The Senator listened intently through it all and showed no inclination to hurry the speaker. Finally he jumped to his feet and exclaimed: "It's a shame! It's too absurd to be true! There should be no tax on motor boats. There is none on automobiles—why one on boats? Wait!"

And then things began to happen.

First Senator Calder called up Senator Moore—he was out—then Representative Fordney of Michigan. "Sure, Mr. Chapman could see him. Come over any time." Senator Penrose of Pennsylvania also "would be in any time at

which Senator Calder cared to call with Mr. Chapman." So would Senator Simmons and Senator Lodge and several other celebrities of whom a request was made for an interview and hearing.

Senator Calder then told Mr. Chapman and the two representatives of the Waterway League to come with him.

The real work then began. Into the presence of each Senator or Representative they were ushered without delay. Each time they told their story, and the Congressman's eyes would indicate that he was hearing something entirely new to him and facts about things he did not know existed. Each Senator and Representative made almost identically the same remark, that it was the first time he had heard of such a thing and if he had known of it before it had passed he surely would have killed it.

Some of the Congressmen were not in their offices, but Senator Calder found them on the floor of the Senate and House and brought them out to the reception room, where he had the three yachtsmen wait. Before the afternoon was over, it was Senator Calder who was explaining the provisions of the tax bill as ardently as though he was a boat owner himself and Mr. Chapman and the others were

While the men were in Senator Penrose's office, he told Mr. Chapman that he was a motor boat owner himself. The editor inquired as to the length of his motor boat, and the Senator replied "72 feet. How much tax does that mean for me?" "One hundred and forty-four dollars a year," he was told. "Not by a jug-full," said the Senator. "I'll sell the boat first." Then he went on to tell why there was any Then he went on to tell why there was any tax at all on motor boats and why we can assure our readers that there will not be any after the coming season if the proper effort is made to have them cut out. The Senator's proper effort is made to have them cut out. The Senator's explanation was interesting, and we will tell you all about it some day. The Senator's story received such a laugh that in the next breath he remarked, "I'll tell you what I'll If you will get Senator Gerry of Rhode Island, a member of the Finance Committee, who wrote the tax, to agree to a change, I'll vote to reopen the case in the Conference." He then told Senator Calder that after he had seen Senator Gerry, to appear some morning before the Conference Committee and argue the points the motor boatmen were after. The Senator from New York agreed to do this. Representative Fordney of Michigan also said the same thing about Senator Gerry.

Now this is where the tide turned and gave Mr. Chap-man at least a hope to get back to New York some day. You see an editor of a boating paper is expected to know all yachtsmen by name at least, and the editor of MoToR BoatinG knows his lesson pretty well. He immediately recognized Senator Gerry as one of the country's foremost yachtsmen. If he was the only obstacle between a fair tax and a prohibitive one, then the battle was as good as won.

Senator Calder called Senator Gerry on the telephonethe Senator was out of town, but would be back to-morrow would our editor wait? Would he-yes, for a month if there was any chance to save the motor boatmen and the industry. "Be back at my office at ten to-morrow, and we'll clean this matter up" were in the Senator's instructions.

MoToR BoatinG was back as strong as ever the next morning, but with real hopes this time. telephoned to the Senator from Rhode Island several times. He hadn't returned. Finally 11 o'clock arrived, and it was time for Roll Call in the Senate. Mr. Chapman stuck like a brother to the Senator, and the two got to the door of the Senate Chamber before they parted—the Senator to answer Roll Call and look for Senator Gerry and Mr. Chap-man to wait for his return with the Senator-yachtsmen. It was only a minute till the two Senators came out arm in arm. "Come down to my office," said the Senator from Rhode Island. When they reached his office he requested all to be seated, and once again Mr. Chapman started to repeat his story—but he was interrupted by Senator Gerry with "Oh, yes, I know all about it all." It was a last chance It was a last chance with "On, yes, I know all about it all." It was a last chance so Mr. Chapman summed up every last bit of courage and replied, "But do you? I don't believe you really do." Senator Gerry, being a yachtsman himself, didn't threaten to throw his callers bodily out of his office, but leaned back in his chair and listened. In a few moments, the silence of his office was broken by the Senator's hearty laugh, which did not subside for some time. Then he said, "Well, I'll confess some one has put something over on me—probably fess some one has put something over on me-probably

some expert. I didn't even know that it was in the bill, Come, let's go over to the Conference Committee and get it all changed; it won't take but a moment.'

And so down the long corridor of the Capitol they went and into the Conference room Senator Calder and Gerry went, while the editor waited outside. They were not there long, but unfortunately Chairman Kitchin was ill so the Committee could take no action officially.

They told me to come back to-morrow morning," Senator Calder remarked, and his telegram to Mr. Chapman printed on page 65 tells what happened.

Thus was a million dollars saved without any one being

the loser.

The tax as it stands in its readjusted state fixes a tax of just double the rate imposed by the 1917 bill and which was paid by the motor boatmen for use of their boats during the summer of 1918. It amounts to the following:

On all motor boats (with fixed engines) less than 5 net tons \$10 per year; over 5 net tons and less than 50 feet in length, \$1 per foot length; between 50 and 100 feet in length, \$2 per foot of length; over 100 feet

in length, \$4 per foot of length.

The exact wording of tax law in respect to the users tax, as well as the proposed 10% tax on new boats, follows: There shall be levied assessed, collected and paid under the following articles sold or leased by the manufacturer, producer or importer a tax equivalent to the following percentages of the price for which so sold or leased:

Yachts and motor boats not used exclusively for trade, fishing, or national defense; and pleasure boats and pleasure canoes if sold for more than \$15, 10 per centum."

That sixty days after the passage of this Act, and thereafter on July I in each year, and also at the time of the original purchase of a new boat by a user, if on any other date than July 1, there shall be levied, assessed, collected and paid in lieu of the tax imposed by section 603 of the Revenue Act of 1917, upon the use of yachts, pleasure boats, power boats and sailing boats, of over five net tons and motor boats with fixed engines, not used exclusively for trade, fishing or national defense, or not built according to plans and specifications approved by the Navy Department, a special excise tax to be based on each yacht or boat, at rates as follows: Yachts, pleasure boats, power boats, motor boats with fixed engines and sailing boats of over five net tons, length not over fifty feet, \$1 for each foot; length over fifty feet and not over one hundred feet, \$2 for each foot: length over one hundred feet, \$4 for each foot; motor boats of not over five net tons with fixed engines, \$10."

As most motor boatmen will be interested in motor boats of under 5 net tons it will be remembered that tonnage is found by multiplying the length of the boat in feet by its breadth multiplied by its depth (from deck to top of keel) and multiplied by six-tenths. This product divided by 100 gives the gross tonnage. To determine net tonnage deduct from the above mentioned gross tonnage the following: The spaces appropriated to the use of the crew and

master, including sleeping and living quarters, galley, toilet and wash rooms, space occupied by anchor gear, storage of sails, charts, signals and other instruments of nevigation and boatswains' stores, provided they are reasonable in extent, used solely for the purposes designated.

In addition to the above deduct the propelling power space. When the propelling machinery is located in the cabin or other partment than is used for other purposes, the machinery space the basis for propelling power allow-

the machinery space, the basis for propelling power allowance, is to be considered the space occupied by the engine and sufficient space on each side for handling it safely and efficiently, otherwise allow whatever space there is. tanks and bunkers, storage batteries, or other engine accessories are not to be included in the machinery space.

The terms master and crew apply only to those employed in the navigation and care of the vessel; the owner, if not sailing master, and guests are to be considered passengers.

In the successful effort to have the Conference Committee of Congress reopen and readjust the tax on motor boats, the officers of the Waterway League played a most impor-tant part. This is but one example of the benefits which are derived by supporting such an organization.

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Bill and me was cuzzins Tho' we came from different stock And we started life together In the store around the block And we both looked kinder nifty, For Coes made me as he should, But Bill, well Bill was different He was a "just as good."
Of course he wasn't to blame for that— He couldn't help his dad, But it didn't give him any show And put him to the bad. Some feller bought me, mighty quick-Just saw the name and said That Coes made wrenches that were right "stopped the others dead." Now I'd been working many a day Fore I saw Bill once more, An' then he lay disconsolate, Upon the old shop floor. I asked him what the trouble was For he was mighty sad, And then he did a shocking thing, He up and cussed his dad. "Dod rot him," I could hear him say Between his battered jaws, "I'd like to drop just eighteen feet By gravitation's laws And swat the old cuss on the head Who made me cheap and poor And he said lots of other things That I could not endure. When he had cooled a little bit He told his tale of woe, How he had laid upon the shelf For near a year or so, Till some poor victim came along Who didn't know the trick Of selling wrenches "just as good," By wrapping them up quick. Well, 'twasn't any time at all When he'd got into use Before the men began to cuss And heap him with abuse. Your jaws are soft, the screw is bent, Your back's as weak as lead; We can't do any work with you"

Till he wished that he was dead. Now look at you," Bill said, in tears, "Your jaws are strong and true; Your screw is good, the back is strong Or haven't they used you?" Used me! Gee Whiz! Well I should smile. If you had seen the men Who've piped my handle six feet long Or used me backwards, then To start a rusty bolt or nut Had swung a hefty sledge Against my handle till I winched, I guess you'd kinder hedge. Used me! Why. Bill, I have Why, Bill, I have to laugh, It nearly makes me sad To think how those great husky yaps Have tried to break me, bad. They don't know how to use a wrench, Don't know the proper way Is just to always pull like this And not to go and lay Their husky frames against a pipe And pull it backward, so. Why any, but a wrench of Coes, Would simply have to go. They've used me for a hammer, Till it made my old head ache, But all it did was bruise a bit, They simply couldn't break.

Yard and Shop

But you-why, Bill, I'm sorry To see you look so bad, For we were boys together And you were a natty lad. But you see you couldn't help it, Your foundation wasn't rock, Your daddy was a "just as good" You didn't have the stock. Your back was weak, your head was soft, Your screw was punky, too, And your handle,-Bill it was a shame To make a wrench like you. "'Tain't your fault, Bill, I know it And you mustn't care a rap But all you're really good for Is to go into the scrap. But that would hurt your feelings So I'll ask the boss for you To put you in a case of glass
Where men can look you through. And then to put a sign beneath it: "Take warning, you who should. This wrench looked well when it was new

Fire-Choke Fire Extinguisher

But 'twas a "just as good"

Especially for those

And then we'll put another sign

Who want to buy good wrenches "Be sure that it's a Coes."

The newest of fire annihilators is Fire-Choke for which the Flexlume Sign Co., of Buffalo, N. Y., have exclusive selling rights. It is a dry chemical, not unlike flour in appearance, which when it comes in contact with fire forms great quantities of gas and instantly smothers the blaze. There are no mechanical complications in its use. It is simply thrown from the hand into the blaze of the flame with a forceful, sweeping motion such as you would use in skipping a stone. According to those who have seen it used its action on the fire is simply wonderful.

Fire-Choke has one point which particularly commends it for use aboard a motor boat. The gas it forms is absolutely harmless; you can breathe it without bad effects. This has always been a point urged against the use of chemical extinguishers forming chlorine gas. The fumes are deadly and when liberated in the engine-room or cabin of a boat they offer a serious problem. Another good point in favor of Fire-Choke is that the chemical itself will not injure any materials with which it may come in contact. You simply brush it off as you would flour. No harm done.

In order to quickly introduce Fire-Choke to the motor boat owners of the country the Flexlume Sign Company is offering to send a free test package of small size to anyone who will ask for it mentioning MoToR BoatinG.

A New Course in Marine Engineering

A new course in Marine Engineering will be given in the Evening Department of the Polytechnic Institute of Brooklyn. The class is open to college graduates and to others having adequate preparation, which will correspond in a general way with that given by the first two years' work in a good technical college.

The course is intended to be of particular value to those who are now employed in some one of the various forms of marine activity in New York and vicinity, who intend to remain in it, and who wish to supplement their present technical qualifications by further study. It will concern itself primarily with the steam power plant of a modern ship, and the calculations involved in its design, construction, testing, and operation. A study of the subject of resistance and propulsion will also be included and consideration given to the use of the internal combustion engine. The methods of lecture, recitation, reference study and drafting will be used as most appropriate in the course of the work.

Two other new evening courses will be started about the same time: Theory of Aeronautical Engineering, with about the same prerequisites as the course in Marine Engineering and Tool and Fixture Design, open to men having a good knowledge of mechanical drawing and of modern machine shop practice.

Albany Boat Corp. Resumes Pre-War Work

It may interest you to know that the Albany Boat Corp., of Watervliet, N. Y., has so nearly completed its Government contracts that it is now prepared to fill all orders. The plans for two 30-foot runabouts have already been laid down, and it is expected that by the end of January they will have three 50-foot de Luxe standardized cruisers under construction.

Bruns Kimball & Co.'s Rebuilding Department Larger Than Ever

That care and pains in rebuilding motors always pays in the end has again been demonstrated by the necessity of Bruns Kimball & Co. in enlarging their shops at 115 Liberty St., New York City, in order that they may take care of their rapidly increasing business. The method in which this firm receives, examines, and rebuilds motors may be of interest and a few of these details are set down here-with.

When a motor is received in the receiving department it is at once externally examined for missing parts, cracked castings, etc. It is then delivered to the inspection department and entirely taken apart and each piece thoroughly cleaned; after which experts examine each piece and advise the mechanic in charge just what new parts must be ordered or made and also what improvements to old models should be added. The main castings are then tested for possible small cracks not clearly visible, and if no such cracks are found then the lower base is placed on new and substantial skids (if old ones were poor) high enough so that the flywheel will not touch the ground. To be sure there is no remaining grit or dirt in the corners, the entire inside of the lower base is usually painted with special enamel paint for this purpose which hardens to such an extent that oil will never affect it. of the main bearings, if the crankshaft was found perfectly true, and surfaces reground if necessary. In many engines new brasses are necessary or new poured babbitt bearings necessary and hand scraping to a perfect fit. Then comes the same operation on the camshafts, Idler gear bushing if any, fitting of connecting rod, lower bearings by hand scraping after new shells are fitted. While all this is being done by one mechanic, under ex-pert supervision, another mechanic has been testing the cylinder for water leaks after removing all paint from the outside and all foreign substances from the water

jackets.

No leaks being found and no reboring or regrinding, or new pistons and rings being necessary, as is found on slightly used outfits out of pleasure boats, he usually fits new piston pins and bushings. It depends on the design of engine whether the pistons are inserted in the cylinder before the cylinder is placed on base or whether the connecting rods with pistons attached are first put in place and cylinders slipped over. Before cylinders are put on, new valve guides are inserted if necessary and if old valves pass inspection they are reground. The cylinder once in place, then comes the manifolds, water connections, spark, and throttle controls, etc., all of which must be put on with the greatest care, using new gaskets in all cases, worn or wrench marked fittings replaced with new work floats in carbureters where necessary, magneto magnets remagnetized, magneto bearings fitted, broken hard rubber terminals replaced, new wiring correctly fitted, valves and magneto distributor or timers properly timed as well as a thousand small items, such as cotter pins and lock washers put where necessary, studs and nuts rethreaded, spark plugs and coils tested and adjusted,

If the engine has a reverse gear, this also must be fitted, in most all cases, with some new pinions (gears) and pinion bushings, reverse band, clutch cam, etc., and repacked with grease. Very seldom is there a case where a new ball thrust bearing is not necessary. All this work is done by skilled mechanics, with marine engine factory training, as well as especially trained in their own ships under the supervision of Mr. Bruns, personally, who probably has the largest experience in this line of business in this country.

Knox Catalog

The Knox Motors Co., of Springfield, Mass., have recently issued a catalog descriptive of their medium - heavy - duty marine motor. This catalog depicts and describes the motor in every detail and should be in the hands of every motor hoat owner.

30-Mile-an-Hour Express Gruisers

Details of the new 30-mile-an-hour express cruisers, built by the Purdy Boat Wks., of Miami Beach, Fla., for A. C. Newby, of Indianapolis, and Robert May-pole, of Chicago, for the annual Miami Mid-Winter Regatta, February 14 and 15, are now available.

The first of these boats, Altonia, built for A. C. Newby, has been launched and

on her trial trip developed a trifle less than 30 m.p.h. After her engines have been limbered up a bit she is expected to do close to 31.

The length of the boat is 42 feet with a beam of 9 feet and a draft of 2 feet 3 The power plant installed is a six-cylinder Speedway engine, measuring 534 x 7-inch bore and stroke and turning 1,400 maximum r.p.m. This engine has proven reliable and also economical for long, high-speed runs, for which the boat is especially designed.

A feature of the boat is that the engine is set well aft, throwing the center of gravity toward the stern. This gives the forward portion of the craft great buoyancy and makes for quicker recovery in a choppy sea. On her trial trip Altonia performed with remarkable smoothness at highest speed and obeyed the helm instantly. No vibration from the engine

was perceptible at any time.

A novel construction is seen in the method of ventilating the engine-room, the air entering a pair of cowls at the forward end of the cabin and passing to the rear through ducts underneath the cabin floor. This injects a continuous stream of pure air into the engine-room, effectually cooling it and removing all odors.

The interior arrangement of the boat is also interesting, the plan being such as to give a continuous inside passage through the owner's cabin from cockpit to cockpit. Entrance to the cabin from the amidships cockpit is gained through a hatch, and from the forward cockpit

through a door and stairway.

The owner's cabin has accommodations for two persons, with a lavatory at the rear and a pantry forward. Sleeping quarters for the crew are provided in a couple of folding bunks swung from the sides of the engine compartment. In an emergency the seats of the cockpits can also be transformed into sleeping quar-The boats will comfortably accommodate an owner's party of two and a crew of two for long runs and for ordinary day runs as many as twelve persons can be carried in comfort.

Important

During the last few years the G. W. Ford Yacht Agency, of New York City, have appraised, for owners, many pleasure yachts that were loaned to the U. S. Navy for the period of the war.

Several of these are to be sold as the owners have arranged with us for the construction of new yachts. Descriptions of these will be mailed to prospective pur-

Addition to Cape Cod Power Dory Co.'s Plant

Having outgrown its present quarters well adapted for small pleasure boats, and owing to the increasing demand for larger boats, and on account of the large amount of work turned down because of inadequate quarters, the Cape Cod Power Dory Co., of Wareham, Mass., has acquired an attractive site, near its present works, of about ten acres, on a deep water front, so that it is now able to figure on larger craft, either pleasure or commercial up to 150

This company would be glad to figure

with anyone desirous of boats of these dimensions as it has competent naval ar. chitects on its staff for these larger size.

In connection with the yard a large trace of standing oak timber was purchased, some of the finest in Massachusetts, so it is well fitted to take on larger work.

Beach Automatic Grib Puller

A good wheel or gear puller is as indispensable in a boat yard as a hammer. It may be used in a great many ways. It is practically the only tool with which a fig-wheel may be removed without the attendant danger of breaking the crankshaft.

The Beach automatic grip puller, many factured by the Greb Co., of 225 State St., Boston, Mass., is built mechanically right. and when once the jaws are closed on the work and the screw is set against the shaft, it is impossible for them to un Tightening the screw forces the hook. jaws inward, automatically gripping the work, throwing pressure toward the shaft or axle and making it more positive and requiring less pressure than the ordinary

The puller positively removes wheels, gears, flanges, couplings, universal joints. wrist pins, and any number of other things. Quick, strong, durable, efficient and simple. It is complete with two sets of jaws; three 7½-inch jaws (open to 10 inches), and three 12-inch jaws (open to

Either a two or three jaw combination may be used, as there is an extra jaw socket directly opposite one of the other jaws. It is also made with a locking de vice by which the jaws may be set and locked in any position, which makes it a one-man puller.

Wm. H. Hand Released From War Work

Since April, 1917, Wm. H. Hand, Jr., of New Bedford, Mass., has given practically all of his time to our Government, having been identified with the great shipbuilding activities of the U.S. Shipping Board and the flying boat building of the Navy Department.

He has been relieved of Government duties and is now in a position to again

personally serve his clients.

Mr. Hand claims that his war work experience has been a wonderful education for one of his profession and feels better prepared to serve you than ever before. Mr. Hand wishes to express his thanks for past favors and hopes to be favored with your future patronage.

Lawrence & Co. Expand

L. Lawrence & Co., of Newark, N. J. who are owners of the Lorentowicz patents for repairing scored cylinders without regrinding, state that their business has recently grown so rapidly that they have just built an addition to their Newark plant which practically doubles its capacity and output. They have also extended their service facilities by opening up new service branches in Philadelphia, Milwaukee, and Los Angeles. These new branches, with their older branches, make a coun try-wide organization for handling their work expeditiously.

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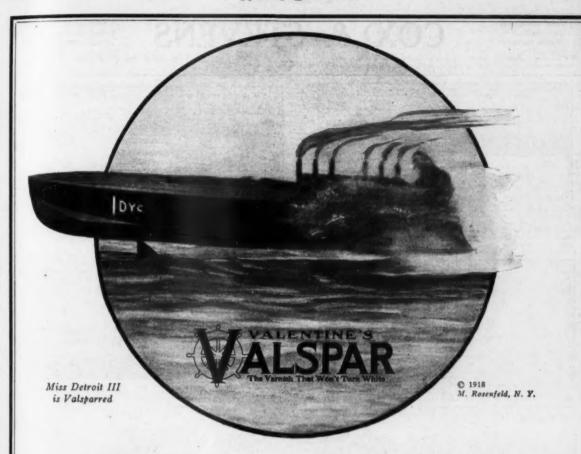
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THIS is more than an advertisement! It's the varnish experience of a master boat-builder in a nutshell. Read his letter:—

Algonac, Michigan, Nov. 4, 1918

Valentine & Company

Miss Detroit III. is without a doubt the fastest boat ever built. In the last Gold Cup races at Detroit there was no time for more than one five mile lap that she had to run with an open throttle.

She is finished with Valspar and the varnish looks as good now as when the boat was put in water. Use does not seem to mar it or destroy its lustre. We use it for bottom finish and entire boat.

C. C. Smith Boat & Engine Company. (Signed) C. C. Smith

That leaves nothing for us to say except that we will be glad to send you on request a copy of our booklet. "How to Use Valspar on Boats."

VALENTINE & COMPANY, 456 Fourth Ave., New York
Established 1832—Largest Manufacturers of High-grade Varnishes in the World

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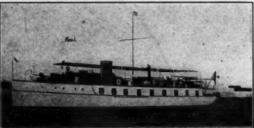
We have a complete list of all steam and power yachts, auxiliaries and houseboats available FOR SALE and CHARTER. A few are shown on this page. Plans, photographs and full particulars furnished on request.



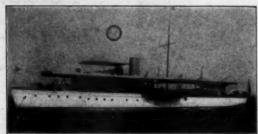
No. 2366—For Sale—Particularly desirable steel, twin screw cruising power yacht; 126 x 18.6 x 6 ft. Recently built in best manner; exceptionally able craft. Speed 12-14 miles; two 135-150 H. P. 6 cyl. arstarting motors. Large deck dining saloon; main saloon, five etaterooms, two bathrooms, etc., aft. All conveniences. Handsomely furnished. Cox & Stevens, 15 William St., New York.



No. 148-For Sale-Steel, flush deck, steam auxiliary achooner yacht; 130 ft. overall. 110 ft. waterline, 26 ft. beam, 15.6 ft. draft. Speed under power 9 knots; compound engine; electric lights; all conveniences. Externely able craft; heavily constructed. Cox & Stevens, 15 William St., New York.



No. 1662—For Sale or Charter—Attractive oo ft. twin screw gasoline houseboat; speed 10-12 miles. Large saloon, four staterooms, two bathrooms; all coaveniences. Handsomely furnished. Cox & Stevens, 15 William St., New York.



No. 3166—Offer desired—Fast, able, modern twin screw steel power yacht; 110 x 18 x 5.3 ft. Speed 15 to 17 miles; two 300 H.P. Standard reversible motors. Large dining and main salcons, two exceptionally large staterooms; all conveniences. First-class condition. Exceptional opportunity. Cox & Stevens, 15 William Street, New York.



No. 3299—For Sale—Modern roomy bridge deck cruiser; 60 x 13 ft. 6 in. x 3 ft. 6 in. draft. Speed 11-12 miles; 65-75 H.P. 6 cyl. "20th Century" motor. Large double stateroom; saloon with two extension berths, galley, bath, etc. Bargain for quick sale.. Cox & Stevens, 15 William Street, New York.



No. 3233—For Sale or Charter—Particularly desirable 123 ft. steel yacht. Speed up to 17 miles. Recent build Dining saloon and social hall on deck; five staterooms, two bathrooms, etc. Cox & Stevens, 15 William Street, New York.

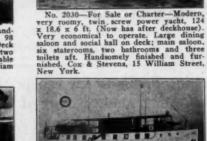
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No. 3427—For Sale at Low Figure—Fast, roomy, twin serew cruising power yacht; 74 x 14 x 3.9 ft. New 1916; Lawley built. Speed up to 16 miles; two 6 cyl. "Speedway." motors 110/120 H.P. each. Large saloon, three staterooms, shower bath, etc. Cox & Stevens, 15 William Street, New York.



No. 1835—Estate Anxious to Sell—Handsome twin screw cruising power yacht; 98 x 16.6 x 4.6 ft. Speed 14-16 miles. Deck dining saloon, four staterooms, bath, two toilets, etc. Very desirable yacht available at low figure. Cox & Stevens, 15 William St., New York.



No. 3151—For Sale or Charter—Modern, twin screw gasoline houseboat; 75 ft. x 17 ft. x 2 ft. 6 in. Speed 10-12 miles. Large deck salons; four staterooms, two bathrooms, dining saloon; all conveniences. Special opportunity. Cox & Stevens, 13 William St., New York.



No. 3035—For Sale—Fast and very roomy bridge deck cruiser; 47 x 10 x 3 ft. Speed 16 miles; 100 H. P. 6 cyl. 4 cycle motor. Separate galler, saloon and single stateroom forward, besides double stateroom and toilet room aft. Electric lights. First class condition. Cox & Stevens, 15 William St., New York.



No. 1426—For Sale—High speed twin screw bridge deck cruiser; 60 x 10.9 x 3 ft. Built by Lawley, 1916. Two 8 cyl. Van Blerck motors; 200 H.P. each; speed up to 27 miles. Double stateroom, saloon, galley, bath, etc. Handsomely finished. Low price. Cox & Stevens, 15 William Street, New York.



No. 1828—For Sale—Cruising power yacht; 75 x 13 x 3 ft. Speed 11 to 12 miles. 50-60 h.p. Standard motor. Dining saloon and galley forward; three staferooms, bathroom and two toilets aft. Excellent condition. Cox & Stevens, 15 William St., New York.

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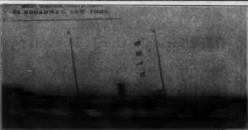
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We have a most complete and up-to-date list of power yachin of all sizes, sail, auxiliary and househeats on file in our office, kept constantly up-to-date by a thorough and comprehensive canvass of the entire yachting field from time to time. We are in a positive to submit full information on any type of beat upon request. FOR SOUTHERN CRUIS-ING this winter we offer a number of very desirable POWER HOUSE BOATS and POWER YACHTS which are specially adapted for FLORIDA waters.



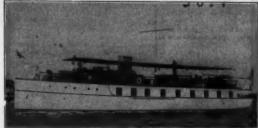
No. 239—For Sale—Reasonable—Twin screw express steam yacht, 112 feet length, double stateroom and saloon. Built by Herreshoft. Owned as gentleman's yacht. Never been in patrol service, in perfect condition. Suitable for ferry or racing yacht tender. Gielow & Orr, 52 Broadway. New York City.

No. 232—For Sale—Handsome steel single screw steam yacht, 142 feet. 2 staterooms and deck dining saloon, also social hall on deck. Triple expansion engine and maximum speed 14 knots. Located New York City.





No. 4591—For Sale—Handsome twin screw steel sea going motor yacht, 126 feet length, 18½ feet beam, 6 feet draft. Built by Seabury. 5 staterooms, all modern equipment, perfect condition and located Great Lakes. Gielow & Orr, 52 Broadway, New York City.



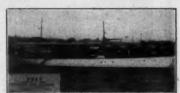
No. 3617—For Charter—Desirable twin screw motor houseboat, 90 feel length, 17 feet, 6 inches beam and speed 10 miles. 4 staterooms and saloon. Sleep 12 persons. Located Florida in commission. Gielow & Orr, 52 Broadway, New York City.



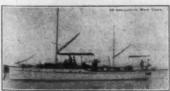
No. 3241—For Sale—Handsome auxiliary keel schooner, 114 feet on deck, 10 feet draft, built by Lawley, steel construction, 3 staterooms and powered with 6 cylinder Standard motor and giving speed 8 knots. One of best available yachts of type in perfect condition. Gielow & Orr, 52 Broadway, New York City.



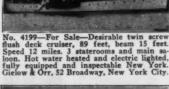
No. 5951—For Sale—40 ft. Hand express cruiser. New 1917. Van Blerck motor. Speed 20 miles. Best construction. Able ses boat. Fully equipped. Price rea-sonable. Gielow & Orr, 52 Broadway, New York City.



No. 3957—For Sale or Charter—Attractive 75 ft. cruiser, beam 15 ft., draft 3 ft. 6 in. Standard engine, speed 10 knots. One doubt two single staterooms. Accommodate five persons. Electric lights, hot water heat. Bargain. Gielow & Orr, 52 Broadway, New York City.



No. 4606—For Sale—Very able 64 foot cruiser, 12 ft. 6 in. beam, 4 ft. draft. 6 cyl., Heavy Duty motor new last year. Speed to knots. One double one single stateroom opposite main salone. Accommodate five persons. Boat beavily built, especially for offshore cruising. Price reasonable. Gielow & Orr, 52 Broadway, New York City.





No. 5850—For Sale—Modern 50 foot Express Hand cruiser, speed 20 miles, built 1916. 8 cylinder Van Blerck motor. Sleeping accommodations & persons. Completely equipped, inspectable near New York. Gielow & Orr, 52 Broadway, New York City.



No. 5455—For Sale—Destrable 48 foot cruiser having 14 feet beam, 34 inches draft, built 1915. Accommodations gives stateroom and saloon fully equipped. Speed 10 miles. Inspectable near New York. Gielow & Orr, 52 Broadway, New York City.



No. 5965—For Sale or Charter—Hand-some sea going motor cruising yacht, 196 feet O.A. 13 feet 6 inches beam, 5 feet 10 inches draft. Standard motor, speed 15 miles. 4 staterooms and saloon, sleeps 9 persons. Yacht well kept, fully equipped and inspectable New York. Gielow & Orr, 52 Broadway, New York City.



No. 4441—For Salo—Able offshore cruiser, 45 ft. leagth, 11 ft. beam, 3 ft. 6 in. draft. Extra heavy construction. Electric lighted. Heavy Division of the commodates four persons. All perfect condition, fully equipped. Inspectable New York. Price low if sold before laying up. Gielow & Orr, 52 Broadway, New York.

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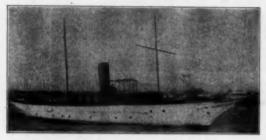
NAVAL ARCHITECTS AND YACHT BROKERS

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Offer for sale the following yachts, some of which are available for charter



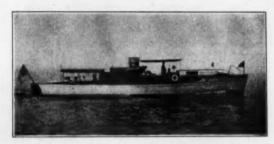
No. 243—Sale—Charter—Twin screw steam houseboat, 116 ft. x 21 ft. x 4 ft. draft. 4 staterooms, 3 bathrooms, dining saloon and smoking room.



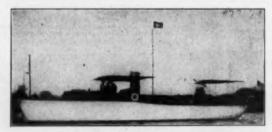
No. 7987—Sale—Charter—106 ft. cruising motor yacht; speed 13 knots; 4 staterooms, bathroom, main saloon, deck dining saloon, etc. Full equipment.



No. 18—For Sale—Estate anxious to sell fast cruising steam yacht, 147 ft. x 17 ft. x 7 ft. 3 staterooms, bathroom, dining salson, sitting room.



No. 8662—Sale—Twin Screw Cruiser. Speedway motors, new 1916. Speed 15 miles. Stateroom, saloon, large cockpit and bridge deck.



No. 7717—Sale—Raised Deck Cruiser, 60 ft. x 11 ft. x 3 ft. 6 in. 50 H.P. Speedway motor. Saloon, stateroom, galley, etc.



No. 8713—For Sale—Attractive Day Cruiser, 50 ft. x 8 ft. 3 in. x 3 ft. 1 in. draft. 6 cylinder Holmes motor. Speed 13 miles.



No. 1847—Sale—Charter—Desirable Houseboat, 85 ft. x 18 ft. x 28 in. draft. 4 staterooms, 2 saloons, bathrooms, etc.



No. 7121-Sale-58 ft. fast day cruiser. Twin screw Sterling motor. Speed 26 miles.

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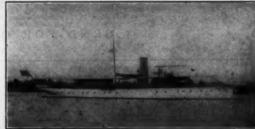
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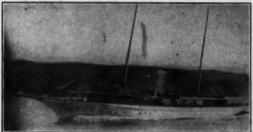
No. 1963—For Sale—Twin screw power yacht, 100 x 16.5 x 4.6, two 20th Century engines, 60/75 H.P. each. Deck dining saloon, 4 state-rooms, main saloon, etc.



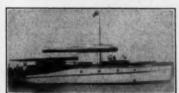
No. 646—For Sale or Charter—Steam yacht 125 ft. x 17 ft. x 6 ft. draft. 5 staterooms, 3 bathrooms. Dining saloon and social hall on deck.



No. 1081—For Sale—Twin acrew, 90 ft. power yacht; splendid accommodation. Recently overhauled and 2 new Standard engines, 4 cylinder, 75 H.P. each, installed 1916. Exceptionally able and fully found.



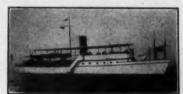
No. 238—For Sale—Steel steam yacht, 170' x 21' x 8' draft. Large dining saloon, social hall and smoking room on deck; 5 staterooms, 3 bathrooms, etc. Completely equipped.



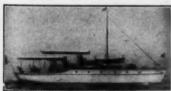
No. 1722—Raised deck cruiser, 55 ft. x 13 ft. x 3.6. Lamb motor. 2 staterooms, main saloon, galley, etc. Price very reasonable.



No. 1736—For Sale—Twin screw power yacht, 97 ft. x 16 ft. 7 in. x 3 ft. 6 in. 4 staterooms, bath room, deck dining saloon, etc.



No. 924-Power Yacht, 92 ft., 100/125 H.P. 20th Century motor, splendid deck space.



No. 1270—For Sale or Charter—Raised deck cruiser 55 x 12 x 4.5. Standard engine 22/37 H.P. Has two staterooms, main saloon, galley, etc. William Gardner & Co., 1 Broadway, New York



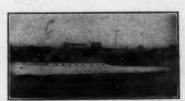
No. 1914—For Sale—Raised deck and cabin house craiser. 50 x 10 x 4. 50 H.P. motor. Price low.



No. 2586-New Patrol type, 54 x 11.2, eight cylinder Van Blerck, speed 17 miles.



No. 1830—For Sale or Charter—Twin acrew Power Yacht 124 x 18.6 x 5.8, splendid accommodations (has new after deck house). Large dining saloon and social hall on deck, main saloon, six staterooms, two bathrooms, etc. Handsomely furnished and completely equipped.



No. 1738—Raised Duck Cruiser, 65 x 11, six cylinder motor, good accommodation.



No. 2558-New Express Cruiser, 45 ft., eight cylinder, 200 H.P. Van Blerck, speed 25 miles.

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Our list comprises all the available yachts for sale and charter. Below are a few of our offerings. Our knowledge of the yachts we offer, and our 25 years' experience in the business insure satisfaction to any one buying or chartering a yacht through this office

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1714-58 foot twin screw express cruiser. Two staterooms, etc. Speed 25-30 miles.



1991-65 foot cruiser. Double stateroom, main cabin, etc. Speed 11 miles.



1490-40 foot Mathis cruiser. Double stateroom, main cabin, etc. Speed 8 miles.



4287—Sale or Charter—90 foot power houseboat. Five staterooms, saloon, bath, etc. Standard motor. Speed 11 miles. Located in Florida waters. Price attractive.



1940-65 foot cruiser. Three staterooms, saloon, bath, etc. Speed 10-11 miles.



1599—50 foot cruiser. Two double staterooms, main cabin, two toilets, bath, etc. Speed 11 miles.



4231—Sale or Charter—85 foot power houseboat. Five staterooms, saloon, bath, ctc. Speed 10-12 miles. In Florida Waters.



1485—150 foot steel steam yacht. Four staterooms, two baths, dining saloon, social hall, etc. Speed 14-17 miles.



1592—45 foot cruiser. Double stateroom and main cabin sleep six people. Speed 12-13 miles.



4041—140 foot twin screw express steam yacht. Speed up to 33 miles.



1492—125 foot twin screw steel power yacht. Five staterooms, two bathrooms, dining saloon, main saloon, etc. Speed 12-14 miles.



4021--120 foot twin screw express steam yacht. Double stateroom, main saloon, dining saloon, etc. Speed up to 27 miles.



1811-58 foot twin screw express day cruiser. Speed 26 miles.



1688—45 foot cruiser. Double stateroom, main saloon, two toilets. Speed 10-12 miles Price attractive.



2011-52 foot express cruiser. Double stateroom. Main cabin, three toilets. Can sleep ten (10) peo le. Speed 16 miles.

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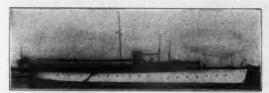
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No. 135—Ocean Going Steam Yacht; British built; American owned; dimensions 214' x 32' x 12'—880 tons; a modern high class vessel at a reasonable price. Frank Bowne Jones, Yacht Agent, 29 Broadway, New York.



No. 1775—125 ft. Steel Express Yacht; excellent accommodations and high speed; practically as good as new; the most desirable vessel of this type. Frank Bowne Jones, Yacht Agent, 29 Broadway, New York.



No. 5937—120 ft. Gasoline Cruiser; twin screw; speed up to 18 miles; 3 staterooms and saloon; splendidly built and exceptionally seaworthy. Frank Bowne Jones, Yacht Agent, 29 Broadway, New York.



No. 6890—85 ft. Elco Cruiser; Diesel engine; 2 double staterooms and saloon; speed up to 15 miles; handsomely finished and equipped. Frank Bowne Jones, Yacht Agent, 29 Broadway, New York.



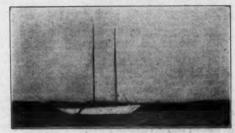
No. 488-68 ft. Express Cruiser; built by Seabury Company; practically new; 2 Speedway engines; speed up to 20 miles; double stateroom and saloon. Frank Bowne Jones, Yacht Agent, 29 Broadway, New York.



No. 2597—50 ft. Power Houseboat; 3 years old; Standard motor; 3 staterooms and saloon; excellent boat in every way. Frank Bowne Jones, Yacht Agent, 29 Broadway, New York.



No. 6557-60 ft. Gasoline Cruiser with auxiliary sail power: good accommodations; of the best design and build; excellent aca boat. Frank Bowne Jones, Yacht Agent, 29 Broadway, New York.



No. 6724—Auxiliary Schooner; dimensions 60 x 43 x 15 x 7; a comfortable small cruiser in A-1 condition. Frank Bowne Jones, Yacht Agent, 29 Broadway, New York.

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These greatly reduced prices are good only to March 10th, 1919.

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The past reputation of Bruns, Kimball & Company in the line of rebuilt engines for the last ten years is a sufficient guarantee to the public.

Send your orders in early with the customary 25% deposit while the stock is complete.

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DESCRIPTION		PRICE	DESCRIPTION		Pasce
Two 350 H.P.	Van Blerck, 12 cylinder, 4 cycle, twin serew outfit, each		\$60-70 H.P.	Brown, 6 cyl., 2 eyels, 1989 A-1 condition, Atwater Kent	
*225-250 H.P.	with carburstor, coil, magneto, reverse gear, each	\$5000		ignition, Bosch high tension magneto, Kingston carburstor, day x 4½, aluminum base, 800 lbs., factory overhauled, like new	\$566
*225 H.P.	tion, reverse gear, etc. Sterling, 8 cyl., 4 cycle, 5% x 6%, double valve, bronze	2000	\$65 H.P.	American-British, 6 cyl., 4 cycle, carburetor, coll, spark plugs, reverse gear, propeller, splendid condition	750
*225 H.P.	base, 2 carburetors, magneto, reverse gear, new	2500	Twin 60 H.P.	each Sterling heavy duty, 6 % x 8, 6 cyl. Complete equipment up to and including shaft coupling, \$2750 each. For	
- 140 M.F.	Jencick, S cyl., 4 c/cle, 71/4 x 71/4, excellent condition, car- burstor, coil, Bosch magneto and magnetic M. & B. ignitors.			Speedway, 6 cyl., 4 cycle, 6 x 6, with carburetor, coil, spark	5000
One 200 H.P.	sterling engine, 8 cyl., 4 cycle, 8¼ x 10, model D, heavy	2500	\$60 H.P.	Diugo, reverse gent	1000
-	duty, with magnetos, coils, reverse gear, etc., brand new. Can be fitted to operate on kerosens	6800	260 H.P.	Speedway, 6 cyl., 4 cycle, 6 x 6, with carburetor, magneto, coil, reverse gear and propeller	1200
1175 H.P.	Jenciek, 6 cyl., 4 cycle, 7 1/2, x 7/3, carbureter, Besch magneto, and magnetic M. & B. ignitors, reverse gear	1600	260 H.P.	Emerson, 4 cylinder, 2 cycle, 5 x 5, high speed model, 350 lbs., carburetor, Delco ignition, reverse gear, rear starter	475
\$150-300 H.P.	8 cylinder, 1917 model. Van Blerck engine, run about 200	1000	100 H.P.	Lamb, 6 cvl., 4 cycle, 6% x 7, carburetor, coil, magneto, re-	1400
	miles, with carburetor, coil; spark plugs, Berling magneto, Leece Neville electric starting and lighting outfit, reverse		*55-00 H.P.	verse gear, propeller	7400
\$130-100 H.P.	gear, thoroughly guaranteed Jager engine, 8% x 12, brand new, heavy duty, with coil, carburetor, spark plugs. Bosch magneto, reverse gear, com-	2500	50-00 H.P.	eoil, reverse gear Mason Jager, 4 cylinder, brand new, type G, heavy duty, 6% x 9, enclosed type, Bosch magneto, coil, carburetor,	-
\$100 H.P.	plete back to and including coupling	4990		spark plugs, electric starter, reverse gear, complete back to and including coupling	2500
	high tension magneto, reverse gear, otler, propeller. Excul-	4070	*50 H.P.	Speedway, 4 cyl., 4 cycle, 6 x 8, with carburetor, coil, spark plugs and reverse gear	958
90-100 H.P.	Standard, 6 cylinder, 8 x 10, late type, with mechanical		\$50 H.P.	Automatic, 4 cylinder, 4 cycle, 7% x 9, with carburetor, ceil, magneto, reverse gear and propeller	1200
80-130 H.P.	oiler, magneto, coil, cartureter, coupling, propeller Mason Jager, 6 cylinder, 6% x 9, heavy duty, enclosed, type G. Bosch magneto, cell, carturetor, spark plugs, electric starter, reverse gear, all complete back to and including		80 H.P.	Burnoil, heavy oil engine, 4 cylinder, 4 cycle, 6% x 9, reverse gear, air starting, brand new, ready for immediate delivery. Price on Application	1300
75 H.P.	coupling, used less than 10 hours	3400	48 H.P.	Barber, 4 cyl., 2 cycle, carburetor, coil, Bosch magneto, spark plugs, etc., 61/2 x 61/4, weight 1400 lbs.	250
70 H.P.	5400 lbs., two Bosch magnetos, coils, carburetor, reverse		45-65 H.P.	Sterling, 6 cyl., 4 cycle, 5 % x 6, carburetor, coll, magnete, reverse gear and propeller	1400
70 H.P.	sear, air starting, complete back to and including coupling Sterling 6 criinder, 4 cycle, 614 x 8, heavy duty type, splen-	2600	*45 H.P.	Doman, 6 cyl., 4 cycle, 6 x 6, 1914 model, carburetor, Bosch magneto and coll, spark plugs, reverse gear and propaller,	2100
	did condition, carburetor, Beach magneto, coil, reverse gear Thelma, 6 cyl., 4 cycle, 5¼ x 5¼, with Beach magneto, coil.	3400		used only 60 hours	1450
440 M.F.	spark plugs, carburetor, reverse gear and propeller, practi-		*48-50 H.P.	Hall, 6 Cyl., 4 cycle, 5 % x 5%, carburetor, Hoson magnets,	1400
*Two 70 H.P.	oally new, 1914 model, weight 1606 lbs	950	40-50 H.P.	20th Century, 4 cycle, 6 x 8 1/2, with carburetor, Boach Dual magneto, and coll and reverse gear, 1916 model	1400
	noto and reverse gear, twin serew outfit, used very little, practically equal to new, ready for immediate shipment, each		40-50 H.P.	Anderson, 6 cyl., 4 cycle, 5 x 5, carburetor, magneto, coll, reverse gear and propeller; nearly new	1000

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DESCRIPTION		Pason	DESCRIPTION		Paice
†40-50 H.P.	Speedway, 4 cyl., 4 cycle, 614 x 8, carburetor, Boach mag- neto, cull, spark plugs, reverse gear	21600	\$12-16 H.P.	Eddystone-Globe, 516 x 5, 2 cyl., 2 cycle, carburstor, coll.	2225
*40 H.P.	Poerious, 4 cyl., 4 cycle, carburetor, coll, propeller as is	15	12-15 H.P.	reverse gear, K-W magneto, shaft, propeller, stuffing-box Watertown, 2 cyl., 2 cycle, carburetor, coil, H. T. magneto,	
40 H.P.	Sterling, 4 cylinder, 4 cycle, 6% x 8, heavy duty type, splendid condition, carburetor, Bosch magneto, reverse gear	2000	12-15 H.P.	reterio dear rear starter	100
4Two 32-37 H.1	P. Standards, 4 cyl., 4 cycle, 6 x 8, carburetors, colls, mag-			Sterling, 2 crl., 4 croic, 516 x 7, carburstor, cell, reverse pear, Model C, guaranteed	475
20-50 H.P.	notos, reverse gears, each	1690	\$19-14 ILP.	Monarch, 2 cyl., 4 cycle, carburetor, coil, reverse gear, bilge pump, 5 x 6 %	250
	tion, propeller; as is	150	12 H.P.	Leagnion, a Cylinder, two Cycle, a X 4, make and Dreak, 1811-	100
20-45 H.P.	Sterling, 4 cyl., 4 cycle, 5½ x 6, with carburctor, coil, mag- neto, reverse gear and propeller	1050		tion, coil, oiling system, etc., complete up to and includ- ing coupling	150
\$30 H.P.	H. L. F. Trebert, 4 cyl., 4 cycle, 4% z 5%, carburetor, coil, reverse gear	300	112 H.P.		盟
225 H.P.	Craig. 4 cyl., 4 cycle, 6 x 7, with carburator, coll. reverse	-	1000000	duty, carburetor, coil, magneto, reverse gear	450 375
25 H.P.	gear and propeller	900	112 H.P.	Hall, 2 cyl., 4 cycle, carburetor, coll, reverse gear	375
	spark plurs	800	13 H.P.	Hagle, carburetor, coll, 2 cyl., 2 cycle, 4% x 5; as is	335 100 150
25 H.P.	magneto, coil, reverse gear, propeller, year guarantee, 2		\$10-12 H.P.	Two cyl. Gray, with carburetor, coll, offer and propeller Harris, 2 cyl., 4 cycle, 4% x 6, with carburetor. Atwater Kent	150
ser is D	cycle, 2 cylinder . Tuttle, 2 cyl., carburetor, coll, spark plugs, reverse gear,	825	10 H.P.	ignition system, reverse gear and propeller	320
	propeller	225	-	Pererso gray	125
22 H.P.	Knox, 3 cylinder, 2 cycle, carbureter, coil, reverse gear and propeller	290	10 H.P. 10 H.P.	Vulcan, 3 evi., 4 cycle, 5 x 6, carburetor, coll. reverse gear	350
\$21 H.P.	Campbell, 8 cylinder, 4 cycle, 5% x 6%, carburetor, Atwater	650		ling: as is	75
21 H.P.			\$10 H.P.	Globe, 2 cyl., 4 cycle, 6 x 7, unit plant with reverse gear, carburetor, coil, propeller	475
620 H.P.	coil, reverse gear Fox, 2 cyl., 2 cycle, earburetor and oiler	750 150	\$10 H.P.	Fulton, 2 cylinder, 2 cycle, with carburetor, call, apark plugs,	190
29 H.P.	Gray, 2 cycl., 2 cycle, carburetor, reverse sear, propeller and		8 H.P.	and reverse goar at	100
120 H.P.	steel shaft	200	\$8 H.P.	shaft and propelier, complete Begal, 2 cylinder, 4 cycle, carburetor, coil, reverse gear	150
	verse gear and propeller	225	18 H.P.	American, 1 cvl., 2 cycle, heavy duty, carburetor, coll and	
416-20 H.P.	coil, spark plugs, reverse gear	400	47 H.P.	Roper Reversible propeller Fairbanks-Morse, 2 cyl., 2 cycle, carburetor, coil, coupling	110
\$16-18 H.P.	Two cylinder, & x 8, Standard engine, coil, carburetor, mag- neto, reverse gear, ready for immediate shipment, used very		7 H.P.	Fairfield, carburetor, coil, muffler and propeller outfit	.75
	little, recent model	1150	8 H.P.	Dutton, single cyl., 2 cycle, carburetor, muffler, coupling;	175
216 H.P.	Pearl, 2 cyl., 4 cycle, carburetor, coll, magneto, reverse gear, propeller and shaft		5 H.P.	Royal, carburetor, coil, coupling	30
¶15-18 H.P.	Lackawanna, 2 cyl., 2 cycle, carburetor, coil, muffer, One-		\$4-6 H.P.	Globe, single cyl., 4 cycle, 5% x 8%, carbureter, cell, re-	
¶15-18 H.P.	Way Clutch, all in excellent condition	125	4 H.P.	verse gear and propeller Stationary, 1 cyl., 4 cycle; as is	175
₹15-18 H.P.	Roberts, S cyl., 2 cycle, carburetor, ignition outfit, reverse		3 H.P.	Hartford, carburetor and coupling, heavy duty	75 85
§15 H.P.	Ferro, 2 cylinder, 2 cycle, with carburetor, coil, reverse gear,		Two gear boxe	Eagle, carburetor, coil and coupling	158
515 H.P.	shaft and propeller		One Seabury i	ore and aft compound steam engine only, 2% x 5% x 5 in.	186
214 H.P.	roverse gear, propeller	180	One reduction	gear used with 200 H.P. Sterling, particulars on request	208
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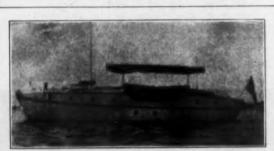
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Advertising in the April number will be unusually advantageous because thousands of MoToR BoatinG's readers will select their spring requirements from its pages.

MoToR BoatinG's Service Department will be very glad to prepare advertising copy if this service is requested.

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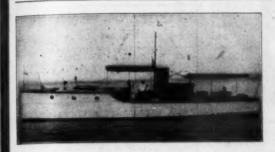
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New York

Great Lakes Yachtsmen Respond Nobly

(Continued from page 22)

Lakes waters. There was a plenty for the lads assigned to these stations to cover and for a time some uneasiness regarding the safety of the vast traffic on those waters. Some who failed to comprehend the possibilities, one is sure, would have been the first to howl for more men on this guard duty had trouble actually arisen.

Boats taken over for duty on these waters included: Jessamine, S. P. 438; Tillamook, S. P. 269; Killarney, S. P. 219; Virginia, S. P. 274; Ono, S. P. 128; Althea, S. P. 218; Ionita, S. P. 388.

Bots leased for the same purpose included: Niagara, S. P. 246; Josephine, S. P. 245; Seatag, S. P. 505; Jaydee, S. P. 692; Marguerite, S. P. 892; Terrier, S. P. 960; Betty M, S. P. 623; Welcome, S. P. 1175; Marjorie, S. P. 1080.

They were manned by men from every corner of the States it seemed except those corners where boats may be found. Our own old sailors were drawn away to land duty while the new lads had to learn both boats and lo-Many amusing incidents and some distressing ones resulted. However, the lads did well and are to be highly commended.

Some of the men were assigned to the big 600-foot freighters or to smaller Past the writer's cottage a big craft goes every fourteen minutes all the season long. On most of these boats you were sure to see two blue jackets who were there to learn deck duty and the work of the pilot.

Buffalo, Cleveland, Toledo, Algonace, Cheboygan, Chicago, Milwaukee, and Duluth men were everywhere, and it was remarkable that the general air of the men invariably drew the approval of the public.

Some of these lads were side tracked into road making but there seemed to be splendid fulfillment to the promise of the signs so common at Great Lakes "You will like it."

It was known that the uniform men at Great Lakes and Chicago piers and points on the East coast would for a time be limited strictly to such routine as the various drills, etiquette, and so on, and in order to give the men a start which they could not get in the short time they would be kept at these schools, the Detroit Power Squadron maintained classes in purely piloting and navigation work; also, classes for machinists through the courtesy of Mr. Cooke, the principal of the Cass Technical High School, and Mr. Potts, engineer instructor, where the lads were able to do very good work in the machinists' branches.

To these classes was also extended the courtesy of the various boat lines who carried these students and afforded them every opportunity to study either in the pilot house and chart room or in the engine-room.

The local papers did much to assist in adding to the efficiency of the classes as did also the supervising inspector.

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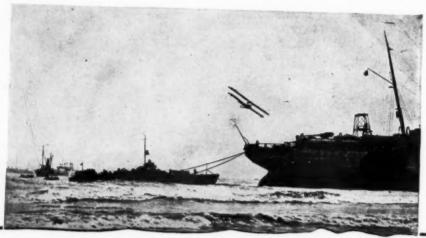
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Postscript

The Evening

Post

Postscript

OUNDED 1801.—VOL. 118. NO. 38

[HUNDARD OF THE]

NEW YORK, FRIDAY, JANUARY 3, 1919

2 CEVINS in Greater Sen, Just and Window Command

SUBMARINE CHASERS TAKE SOLDIERS FROM STRANDED TRANSPORT THROUGH SURF.
ROME WELCOMES THE PRESIDENT; KING, QUEEN AND PEOPLE OUT TO GREET HIM

Gale Imperils W o u n d e d On Transport

All Rescues From Sea

All of to-day's rescues were made from the sea. No effort was made to bring men to the beach in surf boats nor in the breeches budy. Four submarine chasers, numbers 291, 392, 293 and 294, were hazarded in the shallow swirling water between the Northern Pacific and the beach. These seaworthy little boats headed in from the starboard quarter of the transport and bucked against her rusting plates, while scores of clumsy-looking figures in clive drab overcoats and life jackets with a Queen Elizabeth-like ruff about their packs, cautiously descended nearly forty feet of slippery rope ladders with wooden treads.

-NEW YORK TRIBUNE

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THE CAILLE PERFECTION MOTOR COMPANY 542 CAILLE BLDG. DETROIT, MICHIGAN, U.S. A.

When the War Came Close to New England

(Continued from page 35)

promised rapid promotion. Men with any mechanical experience whatever were wanted to operate gas engines in the boats of the proposed patrol fleet. Owners were urged to enroll their boats, form a crew among their friends and, holding a commission as ensign themselves, to see that their crews enlisted in the Reserve and then assume command of their new Warship.

Of course, time changed much of this early planning, but about every boat in Portland was promptly offered, and their owners scurried about to secure suitable men for their crews. This period was about as stirring as any that we had along the Portland water front. We had yet to find out that rigid physical examinations and other obstacles would eliminate many of our would-be admirals.

Soon after this meeting both the Portland Yacht Club and the Power Boat Association on Holyoke Wharf offered their clubhouses to the Navy Department for use as Coast Patrol Headquarters for the duration of the war. Since the house of the Power Boat Association had a long substantial wooden building adjoining it (a grindstone factory before war stopped the importation of English stones), which would work out well as barracks for the men, their house was chosen.

Early in the spring of 1917 the little express cruiser Lynx, owned by Nathaniel P. Ayer, of Boston, reached the Portland Yacht Club and tied up alongside the wharf. She had on board Naval Reserve men, whose mission it was to recruit men and enroll suitable boats along the Maine coast. Naval Constructor Patch was sent along to inspect craft which looked promising and make a report to the Navy Yard authorities.

The Yacht Club was turned into a sort of recruiting station and many members and others signed on then and there. Lynx, a trim 45-footer of about 25-mile speed, looked to us like the real thing in patrol boats. She had a formidable looking 1-pounder mounted on deck just forward of the bow cockpit. I remember how we were all eager to squint along the barrel and see how it would seem to snuff the top off a peris-cope a mile or two away. This gun it finally appeared was secured at the Navy Yard mostly for appearance sake and was of a very early vintage. It's close proximity to the binnacle led us to inquire if it did not affect the accuracy of the compass, but the crew said that they had never noticed anything of the kind.

About this time Henry C. Hersey, Rear Commodore of our club was commissioned as ensign. He was in command of the Power Squadron of the club and extremely popular with all the power boatmen. Fred Talbot also went in as machinist's mate, and his chum, Roger C. Hay, joint owner with Fred of the good ship Chicken, also enlisted. Both boys were favorites with everybody in the club. Kimball Frisbie, the

other member of her crew, entered the

Warren King enrolled the 43-footer Question II soon after this and was commissioned ensign and given command of the ship. He was one of our navigation school men at the Naval Reserve headquarters. He began his duties at once and appeared in overalls and jumper painting the white topsides of his new command the inevitable battleship gray. He served creditably in our Portland Patrol for several months and was at length transferred, I think, with an advance in rank, and disappeared into the oblivion which official censorship throws round men in the Service.

Lawrence Day, leaving behind him an extremely brilliant record, completed one of the short courses at Annapolis and entered active service. Later in the war Day commanded one of the 110foot chasers out of a southern port

foot chasers out of a southern port.
Soon after Henry Hersey received his commission as ensign, Mr. Huston, a wealthy Philadelphian, who owns a summer home in Casco Bay, tendered his 65-foot cruiser Dixie to the Maine Committee of Public Safety as a patrol boat and from them the Navy Department accepted the fine craft and placed Hersey in command. He immediately began repainting the sleek white freeboard and rich mahogany houses with the somber war paint, which used to be considered of lowest visibility until some artistic soul conceived the zebralike color scheme which have more recently supplanted it. Hersey was rapidly pushed ahead, and for a time held command of the Portland Section, later still going to Boston on important duty. Dixie and Question were closely fol-lowed by the police boat, a 30-foot raised-deck craft, which Portland's Police Department had rather spasmodically used for several years as a harbor patrol. This boat had a 24 h.p. four cyl-inder Regal engine, but was rather small for Naval use, even though she was employed only about the upper har-bor. The 40-foot Dlonra was another addition, a smart craft of 26-mile speed, built by Britt Bros., of West Lynn, for C. E. Arnold, of the Portland Yacht

Gradually now the Patrol Headquarters at the end of Holyoke Wharf became regulated and its personnel and fleet increased rapidly. Carrol Brown, Lieutenant, J. G., one of the first of the Yacht Club members to receive a commission, maintained a recruiting office in the customhouse for some time, but was transferred to the new headquarters when they were ready for occupancy. He saw considerable recruiting service under Lieut. Snow, who was the first Section Commander, and he was for some time second in command of the Portland Section, being later transferred to Portsmouth, N. H.

Walter Camp, a Navy paymaster of Spanish War days and a prominent yacht club man, promptly gave up an important business proposition and returned to the Colors at the very other of the war. His thorough business training, coupled with his previous knowledge of his chosen branch of the service, has undoubtedly made him a very valuable officer.

It is not an easy task to single any individual Portland yachtsman being especially useful or prominent the Naval Reserve. All have done the full duty, shirking nothing. Nea bers are with the colors, and in prop tion to membership the Power Association is scarcely less fully resented. Of the latter organization Ensign Fred C. Breene has been pre inent during the entire period of the war. He was in command of a patrol boat in the earlier months, but later was placed in charge of the Portland Headquarters, a position which he still holds although the base is now being demobilized as rapidly as possible. Ensign Breene had a bit of sea experience in his early life and was a member of the Naval Reserve navigation class. His services have been of great value to the Reserve.

During the first winter the value of larger boats was fully demonstrated. and two of the new 110-footers were added to the squadron during the summer of 1918, which, with several sizeable cruisers, made a fleet of nine very serviceable craft, most of them adequately armed. Talofa, a very wellknown steam yacht of the scout-type, was a permanent unit of the little squadron. The rakish Akbar, with her two stacks and big twin gasoline engines, looks like a tiny destroyer, and under Cap'n Long, an old steam boutman, was the section dispatch boat. She shows a speed of 25 m.p.h. and proved a very useful craft. She was a part of the famous Drexel fleet of Islesbora. Ghurka, a fine, husky craft of more modest speed pretensions, but with a heavier armament, makes an excellent all-round patrol boat. Her old hailing port, I think, was Boston, where she was one of the most stylish of the motor-driven pleasure craft. The 42-foot. Cenda, another Massachusetts boat, with her canoe stern and tiny after cabin, has lost her beauty since the big man's size pilot house was planted in her cockpit. She has done her bit of the repair crew. Other boats have come and gone. The two converted beam trawlers which have made their headquarters at the Portland Station were two of the famous Boston fleet and dragged for fish in place of bombs in more peaceful days. Doubtless they will soon again be bringing their huge catches into the Boston Fish Pier.

In our rather infrequent sails about the harbor during wartime and our occasional nights spent on the boat at the mooring, we have been interested observers of the activities of the Coast Patrol to the limited extent to which these could come to our notice. outiet ousiness revious

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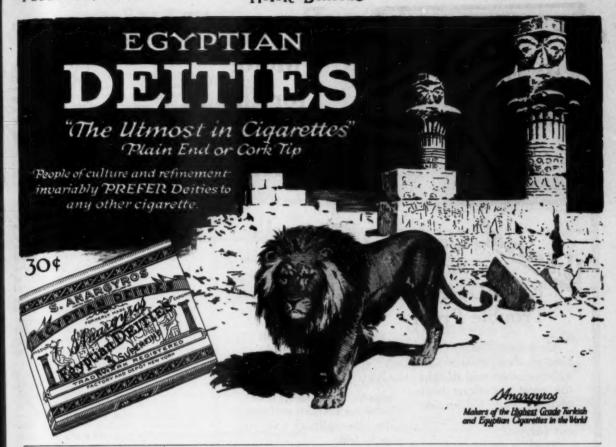
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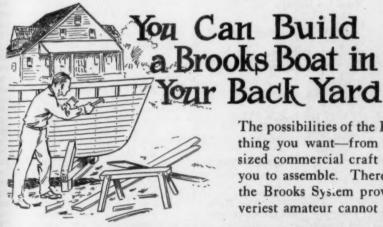
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(Continued from page 16)

the writer truthfully says in part: "Most of the S. C.'s. A full compliment consists of twenty-two men. The quarters are cramped, to be sure, but the chasers are not yachts, and the Navy is not conducting a yachting cruise." This point is well taken, but turning it end for end one can use the same argument, that yachting produced the men best fitted to man and handle these chasers, and do efficient service under these very conditions.

Yachting is nothing more or less than simply play. It is playing at boating. The golfer who happens out on the green may pick up a club and wang a ball with no particular effort to send it ball with no particular effort to send it any particular distance or put it to any particular place. This is merely whiling away time. But when he takes up his stick and drives that ball with an objective point in mind he employs whatever skill he may have acquired and this play takes the form of sport. The next step is to vie his skill with that of his friend and a contest for more macy of effort follows. Thus follows. premacy of effort follows. Thus follows proficiency.

The same is true of boating. Some may get in the boat and shove her off, while away the time by drifting or sailing about on the water, with no objective point in mind, and yet get a deal of run out of it. This is recreation. That innate spirit to excel leads to contest. Then follows the race. To win one must have skill. To acquire this skill one must have knowledge of the waters, the construction of the boat, the operation of boat and power, and there is no end to it.

The Yachtsmen's Club of Philadelphia probably did more than any one other organization of the kind in the way of turning out high class motor boat navigators. In years gone by this boat navigators. In years gone by this club, each winter season, had its navigation school, where lectures were given, and where men were taught in matters of all kinds pertaining to a nautical character. The Yachtsmen's Club was a sort of clearing hose for the great state of the great state. the many clubs along the water front, and along the Jersey coast contiguous to the city. It was here that men were prepared for deep sea work. It was here where long distance deep sea races were planned. It was this work that made men capable of handling boats in all seas and under all conditions.

In the clubhouse at 13 and Walnut Streets rests the James Gordon Bennett trophy, commonly known as the Ber-muda Cup, attesting the service this club has done in making seamen out of the ordinary river boatmen. The roster of the men who played important parts in the coast defense work, in the manning of submarine chasers, and even now in supplying men for cargo car-riers include many who received the first navigational education, and the subsequent training because of affilia-tion with the Yachtsmen's Club, and kindred organizations.

(Continued on page 88)

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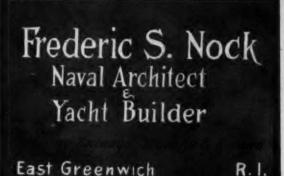
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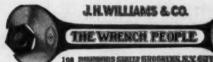
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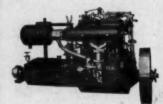
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Delaware River Responds with 60 Motor Boats

(Continued from page 86)

So in a word lessons have been learned during this war. While the motor boat was really only a plaything, and while it was often scoffed at as such, the use of the motor boat in the war has taught the naval folks great lessons. The first development is that properly designed boats can stand up for continuous service and take severe punishment. It has been proven that for efficiency it is necessary to have a proper balance as between machinery and hull, or as between hull and machinery. One of the factors discovered is that the deck fittings on most boats were unsatisfactory, a fact which is worthy of a story by itself but one to be written more so from a technical

In this story it is intended to show more particularly the boon the yachts and vachtsmen were to the service in the coast patrol work. The all important lessons taught were taught to the naval authorities. The things they have learned were largely known to the men who studied yacht construction, and especially to the men who gave time and thought to racing craft of the kind used in the Bermuda races, the Havana races, and other long distance races. In these long distance deep sea contests Philadelphia took a foremost place, both in yacht construction and and yacht handling at sea.

The average yacht is not built for ar purposes. Yet out of the study war purposes. Yet out of the study and development of motor yacht construction has developed the motor war craft. The first step in that direction was the building of the 110-footers. Now has come the Eagle boats. This development can largely be traced back to the gruelling long distance sea contests such as the Bermuda races, Havana races, and kindred deep sea con-

Aside from the educational value there were immediate values that the pleasure yachts and yachtsmen filled. When this war came on us we were unprepared, a story told and retold until it becomes nauseating. The fact re-mains that ships and vessels of all kinds were needed, needed immediately and most badly needed. Cargo vessels were shifted out of their customary to do service more urgently needed elsewhere. Other vessels had to be commandeered to take their War vessels were needed so places. that there was a game of checkers moving from here to there, the smaller tak-ing the place of the larger, so that finally pleasure craft had to be called on to do the work of coast defense. In this capacity they served in almost every imaginable way. They were used in guarding our harbor, in boarding work, in dispatch work, and even in submarine chasing. They were used as school ships and in instruction work, They were used in teaching raw recruits in navigation and deep sea work.



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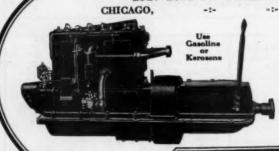
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THE CARBURETOR WITHOUT A DEAD SPOT

Naval Activity at New Haven

(Continued from page 21)

for and assigned to the reserve officers' school at the Naval Academy, was then assigned to the U. S. S. New Mexico, the largest sized battleship afloat. He is the owner of the 40-foot sloop Helena.

Le Roy A. Chidsey, C. El., G., U. S. N. R. F. Enrolled at New Haven as chief electrician, has served at Section Base 1, New Haven, in charge of the machine shop for the repair of patrol vessels and other work. He has owned various small power vessels.

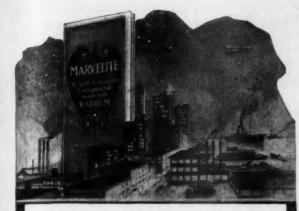
various small power vessels.

Frank S. Cornwell, Lieutenant, U. S.
N. R. F., New Haven Yacht Club, U. S.
Power Squadron. Enrolled at New
Haven and was assigned to duty at Section Base 1, New Haven, Conn., where
he served as executive officer until November, 1917, when he was transferred
to Pelham Naval Training Camp and
given command of the Second Training Regiment in which capacity he is
now serving. Lieutenant Cornwell has
had many years of experience in the
Naval Militia of Connecticut which he
served as junior lieutenant during the
Spanish-American War on board U. S.
S. Elfrida, of which vessel he was executive officer. His years of naval experiences has made his services of the
greatest value in the training of men.
He owns the 50-foot yacht Katchen.
Lieutenant Cornwell was the first commander of the Power Squadron of
New Haven.

His ability as a practical naval officer afloat he has had no opportunity to exercise, but it is doubtful if he could have had any assignment where his value to the service could have been greater than in the production of trained men.

James F. Crum, Machinist, U. S. N. R. F., Waucoma Yacht Club, U. S. Power Squadron. On account of his expert knowledge of gasoline engines, this officer has been assigned to engineering duties, most instruction duties. He has recently been transferred to the Naval Aviation and is now serving at the Aviation Base at Eastleigh, Eng. He is the owner of

Trixie. Osborne A. Day, Lieutenant J. G., U. S. N. R. F., New Haven Yacht Club, U. S. Power Squadron. Enrolled at New Haven and was assigned to duty at Section Base I, New Haven, where, under my command, he organized and took personal charge of the instruction of men from May to October, 1917, at which time the Pelham Naval Training Camp was opened and he was transferred to this camp and given command of the Probation Regiment He is now in command of the Detention Camp at Pelham. He had several years' experience in the Connecticut Naval Militia, both in engineering and deck duties, which has made his services peculiarly valuable in the training of personnel. He owns the auxiliary sloop Boojum-He was formerly Lieut. Commander of the Power Squadron of New Haven (Continued on page 92)



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Naval Activity at New Haven

(Continued from page 90) and has been Fleet Captain of the New Haven Yacht Club.

R. T. Downes, New Haven Yacht

George F. Eaton, Lieutenant J, G., U. S. N. R. F., New Haven Yacht Club. Enrolled at New Haven in March, 1917. as ensign, has been on duty at Section Base 1, Third Naval District, New Haven, throughout the war as instructor, especially in seamanship and navigation, member of Examining Board and since November, 1917, as Executive Officer (second in command). Lieut. Eaton has had service in the Naval Militia as enlisted man and as officer, has been to sea on sailing vessels as mate and has been a yachtsman all his life; all combining to make his services as a Naval officer quite useful. He formerly owned the 30-foot sloop Ione and later the 30-foot sloop Otter. Otter

was designed and partly constructed by himself. He was promoted to Lieutenant J. G., in April, 1918.

Franklin Farrell, Jr., Lieutenant, U. S. N. R. F., New Haven Yacht Club. Enrolled at Newport before the beginning of the war and was assigned to command U. S. S. Dawn, of which he was the owner, and performed patrol duty in the Second District, based variously at Newport and New London, until the winter of 1917 when he was promoted to Lieutenant J. G., and assigned to duty as Inspector of Ordnance in a Connecticut factory, building 5-inch guns. Here he served until the present time; he has recently been promoted to Lieutenant. Lieut. Farrell is the only New Haven yachtsman who took part in the civilians' cruise and subsequent motor boat maneuvers in the summer of 1916. His experience in manufacturing in civil life, made his services of exceptional value to the Navy as an Inspector of Ordnance.

Austin M. Harmon, Lieutenant J. G.,

U. S. N. R. F. Enrolled at New Haven in March, 1917, where he served as enrolling officer and later until October, 1917, in charge of training. Being a teacher by profession, he carried the main burden of the instruction work at New Haven in the preliminary period many weeks before enrolments were Upon the opening of the Pelbegun. ham Training Camp he was transferred to it and now has command of the Probation Regiment there. He is a yachtsman and has done most of his sailing

on the Maine coast.

William J. Hickey, Boatswain's Mate, First Class, U. S. N. R. F., New Haven Yacht Club. Enrolled at New Haven in 1918 as boatswain's mate, first class. He received this rating on account of his yachting experience and experience in the State Cavalry. He was assigned to Section Base I for training and after four months was recommended by the Commanding Officer for the Ensigns' School at Pelham, where he would have been commissioned an ensign upon graduation had not hostilities suddenly ceased when they did.

(To be continued)

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The two cylinders, firing at the same time, neutralize the shock. Only by this two-cylinder opposed construction can you avoid the vibration that makes riding disagreeable, opens seams and ruins rowboats.

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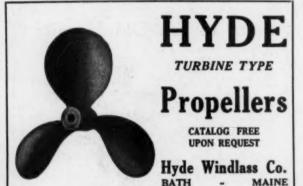
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Our plant is admirably equipped to produce high-grade cruisers, runabouts, small tugs and other commercial vessels at the lowest possible cost. We can supply at short notice anything from K. D. frames to complete outfits of the finest kind.



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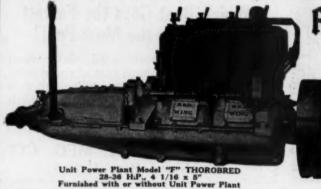


When you decide to order that new boat, whether commercial or pleasure, why not let us build it for you? Our workmen are the master craftsmen of the industry and our location gives us the pick of eastern lumber stocks. Richardson boats can be built to order to meet individual requirements. They embody the features you want at prices that are most

Write to-day for sketches and estimates.

Richardson Boat Company No. Tonawanda, New York





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Hundreds of thousands of young mer., every one a "live wire", are being restored to civilian life with its demands for excitement, pleasure and work. They are already buying boats. They are going to buy more boats, many times over, than America has ever built and sold before.

The Red Wing THOROBRED, everywhere recognized for its supreme service and value, will simplify your power problems and help build your business.

Write us for all the facts on our four models, 14 to 40 H.P. They burn either gasoline or kerosene.

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High Speed Sea Sleds and Surface Propeller Boats

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We are furnishing them to some of the leading marine engine builders. Carbon and Alloy Steel, Heat Treated to your own specifications. We grind all Pins and Bearings. Forged, machined, and finished complete in our own plant. Let us quote you.





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MARINE RAILWAYS STORAGE BASIN Port Clinton, O.

Comfort and Class Combined in the Niagara

Niagara boats offer to boatmen the utmost in comfort and durability; yet there is all the smoothness and classiness of line that makes any craft stand out among its fellows.

Built carefully and well by an organization located in the best lumber district in the United States, the Niagara embraces every desirable feature known to boat builders. The Niagara line of runabouts possesses those subtle refinements that lend an air of impressiveness and dignity.

The quality of material and workmanship used in the construction of every Niagara is superior—we believe that built-in quality is the most important factor in the attainment of complete boat satisfaction.

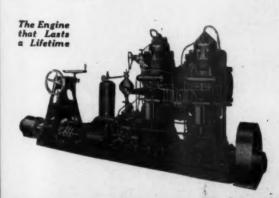


The Niagara booklet tells you a lot about boats you never knew before. You should send for your copy to-day.

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GULOWSEN "GREI" ENGINE Power Plant Perfection for the Work Boat



The Gulowsen "Grei" Engine is a powerful heavy duty power plant that operates efficiently and economically. It is the oldest crude oil engine on the market today, having been built for the last sixteen years.

It burns crude oil and may be had in a variety of sizes from 4 to 360 H. P. Under normal conditions it consumes about ½ pint of fuel and less per H. P. per hour.

The Gulowsen "Grei" is remarkable because of its unusual flexibility—something rarely found in a heavy duty plant. In equipping your work boat with this motor you will overcome all of the heavy duty problems.

4 to 100 B. H. P. ready for immediate delivery from Seattle or New York. Reasonable deliveries on larger sizes up to 360 B. H. P.

Write today for catalog.

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AT THE OLD PRICE HERFURTH ENGINE & MACHINERY CO.

Buy a Campbell and Keep Going



Sizes 5 to 60 H.P.
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PAY BIG DIVI-DENDS. They use 5e fuel old testead of 20c gas-

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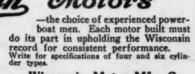
Give longer life to storage batteries.

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REVERSE COMPANY







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Wisconsin Motor Mfg. Co.

Iceless Cooler

(Continued from page 30)

down to reach the inner bottom of the galvanized pan. The opening for the door must be provided and the door itself covered in a similar fash These covers should be made so that they can be readily removed and washed when necessary.

The method of operation is as follows: The cover is drawn over the wire mesh box and thoroughly wet with water. The pan underneath is filled to a point where it will not splash out with the roll of the boat, the extended nice

covers being in the water in the pan.

The entire device is placed where it will be exposed to the most breeze and projected from the direct sun rays. This will cause the water on the cleth cover to evaporate rapidly owing to the relatively large area exposed to the air with a consequent noticeable reduction in the temperature within the box. As rapidly as the water evaporates the water in the pan will be drawn up through the cloth cover by capillary attraction in the same manner that a lamp wick feeds oil to the burner. The evaporation may be more rapid than the renewal of the water supplied in this way, and it may be necessary to occasionally help matters by wetting the top cover directly. F. W. H., N. Y. C

Honor Roll

(Continued from page 60)

Waterway League West Detroit B. C.

On J. C. Clippert
Oliver Charest

of America
George King
George King
George Magalith
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Ralph G. Marr
Frank Martell
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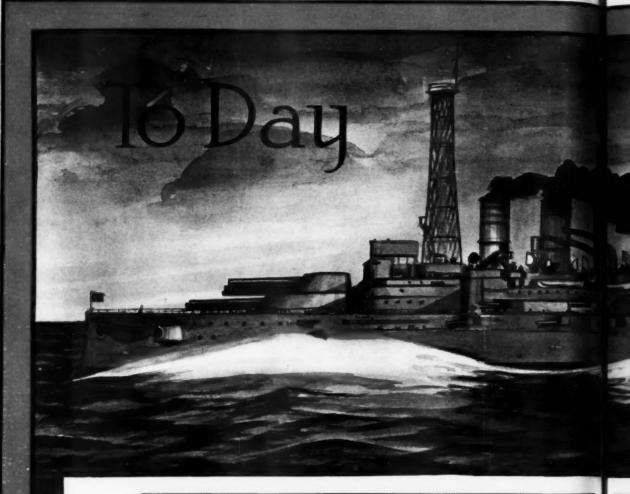
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Jas. Commisky
Frank Cooney
Carbart, Francis
Harry Krause
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Ensign.
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Wilbur Sherwood
Victor L. Sandstedt
Eric Sweeney
Ralph Timm

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Yesterday and-

When writing to advertisers please mention MoTOR BOATING, the National Megazine of Motor Boating Advertising Index will be found on page 140



It seems a far cry from the wind-propelled frigate of yesterday to the modern triple-turreted battleship of to-day.

Wind power has given way to steam—to gasoline—to electricity—to oil.

The internal combustion motor of even a few years ago seems crude indeed beside the highly perfected

power plant of to-day.

With the coming of the popular sizes of marine motors came the demand for a real, dependable marine transmission.

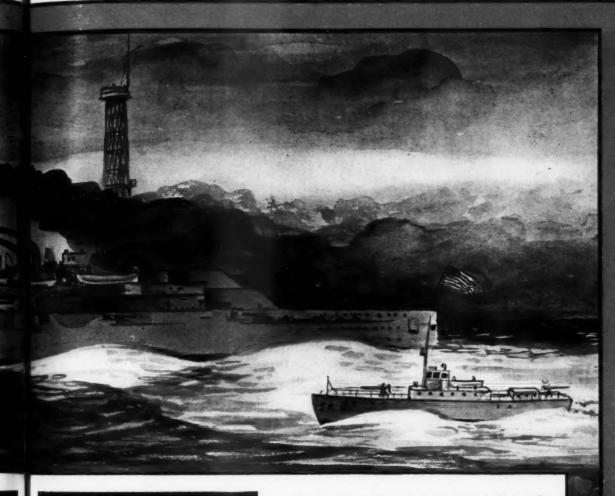
How well PARAGON Reverse Gears have filled this demand is evident by the number of marine motor

How well PARAGON Reverse Gears have fined this definance is evident by the hander of marine builders who use them as a part of their regular equipment.

Engine builders who used the PARAGON ten years ago are its firm friends to-day. Occasionally one is lured away for a season by the bait of lower price—but he generally comes back. We have yet to have an engine builder tell us that PARAGONS have fallen down!

Paragon's Part in the War

Now that hostilities have ceased, it is not out of order for us to speak of the thousands of PARAGON Reverse Gears which have formed part of the equipment on the tenders and auxiliary boats of the Navy De-



Marine motor builders who have not yet decided on the transmission to be used on their motors will be interested in knowing that the thousands of motor tenders in the Navy are equipped exclusively with PARAGON Reverse Gears.

This was the result solely of years of actual experience with PARAGONS.

Benefit by Others' Experience

Whether you are a boat owner looking for a new gear for your boat or a manufacturer of marine motors, we ask you to judge PARAGONS by the years of satisfaction they have given others.

See the list of PARAGON users on the next page. Realize that these builders have spent years of experimenting with reverse gears—that they stake the reputation of their motors on the performance of their reverse gear equipment. PARAGONS have solved their transmission problems.

Engine manufacturers who have not yet decided on the reverse gear equipment for their reverse gears.

Engine manufacturers who have not yet decided on the reverse gear equipment for their new models may profit by the transmission experience of other builders' reverse gear troubles by getting in touch with us now.

So when you order your new motor, add this line, "To be equipped with PARAGON Reverse Gear." It's the proverbial "ounce of prevention."

SEND FOR BOOKLET

PARAGON GEAR WORKS

Cushman Street

Taunton, Mass.



are found as regular transmission equipment on America's finest motors. The following list of users is our best recommendation. Anderson Engine Co.

list of users is our best recomment.
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—and numerous others.

Send for Illustrated Booklet. Free

Paragon Gear Works

Cushman Street

Taunton, Mass.

1919

The National Motor Boat Show-on paper

This special section of February MoToR BoatinG was conceived in the interest of the thousands of enthusiastic boatmen who are naturally disappointed in the probability of no Boat Show this spring.

If offers to them the next best thing. It is truly a Motor Boat Show. Of course, it's minus the flags and decorations; nor can it convey the good fellowship and personal atmosphere of the Annual Exhibition itself.

But it tells the whole story—possibly in a more concise manner than would be possible at the Palace; its readers are at least free from interruption, noise and confusion.

The advertisers who have used some of these pages to tell about their products are absolutely reliable—as is every advertiser whose name appears in MoToR BoatinG.

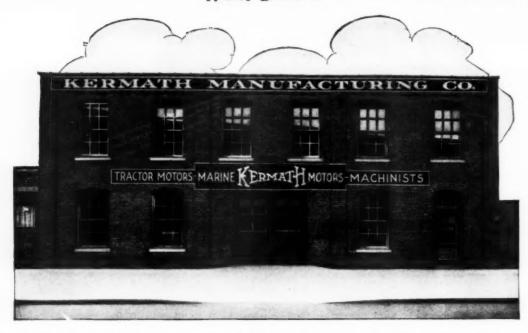
That this Section will assist in the selection of your spring purchases is the hope of the editors of

MoToR BoatinG

119 West 40th Street

New York City





The New Home of Kermath Marine Motors

Kermath Manufacturing Company of Detroit Now Operating in Their New Modern Factory Building at 672-4 Commonwealth Ave.

A POST-WAR development of genuine importance to motor boat owners, and particularly to Kermath motor users the world over is the removal of the Kermath Mfg. Co., from the factory they have occupied so long at 45 Fort St., East, Detroit, Mich., to their new up-to-date plant at 672-674 Commonwealth Ave., Detroit. The point of particular interest is that the new quarters give room for not only considerably enlarged production but also for the development of the most efficient manufacturing methods in the building of Kermath motors.

The first floor of the new plant, which covers approximately seven thousand square feet, is of concrete and is devoted entirely to the machinery equipment. On the second floor are the assembling, testing, packing and shipping departments. On this assembly floor, in addition to the ample side light afforded by large windows, they have installed skylights which make it a real daylight factory and help materially in maintaining a high standard of workmanship for assembling and testing.

Modern ideas of production have governed the laying out of the new plant. The arrangement is planned on the progressive system through the entire building so that from the time the rough casting enters the door until the finished engine leaves the shipping room, the work is routed in the shortest and most direct line, step by step, from one operation to the next. Handling is reduced to the absolute minimum and the system operates with the automatic regularity of clockwork.

In equipment, too, every possible improvement has been adopted. Of course, a great many new machines have been added as the new quarters contain practically twice as much floor space as the former factory. Special swivel stands have been built for holding the motor during final assembly. A single workman can handle the motor throughout this operation, moving it about to reach each part in the quickest and easiest way.

When the assembly is completed the motor is lifted from the stand by an overhead trolley and moved to the testing stands. After the testing the trolley again moves it along to the painting department where the painters are able to get at every part and finish it quickly while the motor is suspended in the air. The trolley then carries it to where

it is crated, after which the crated motors are trolleyed to the trucks for shipment.

During the entire progress there isn't a single point where it is necessary for the operators to use great physical exertion in the handling, even when the engine is in its heaviest shape, which is when it is crated for foreign shipment. The handling of all the heavier castings is similarly provided for.

This new plant fulfills a definite Kermath plan as it has long been a fixed policy and practice with the Kermath company to build their marine motors along the most approved lines of modern quantity production methods, such as have been worked out in some of the larger Detroit automobile factories. Years ago they took a long step in this direction by confining their line to only one type of motor which they build in three sizes. By concentrating on this one type they have been able to constantly refine it in design and workmanship without incurring big experimental expenses or delaying production while new models were being worked up.

The wisdom of this established policy is already proved by the wide sale and world-wide use of Kermath motors as well as by the fact that they have given complete satisfaction in so many different sizes and types of boats, and in so many kinds of service. They have been installed in high speed runabouts, medium heavy cruisers and in commercial boats. Wherever the selection is based on the stated rating and capacity of the motor it has been found that the Kermath stands up to continuous service and withstands every strain.

For 1919, Kermath motors will be continued in their three standard sizes, namely 10-12 h.p., 16-18 h.p. and 20-25 h.p. Ignition is optional by Kingston, Eisemann or Bosch magneto or the Atwater-Kent battery system. The two-unit Wagner electric lighting and starting system with Willard storage battery is installed where specified. While the general design of the motor follows standard marine engineering practice throughout, a careful study of this motor proves that every detail has been most carefully worked out. Motor boat owners will be interested in the information given in the Kermath catalog which is sent free on request.—Advertisement.

Paragon Builds Gears for Marine Trade

Leading Motor Manufacturers Have Found It Worth While to Turn Their Gear Problems Over to Paragon Gear Works for Solution

T is a distinctly modern and distinctly American principle of manufacture that the making of a highly spe-Lialized unit should be left to the care of specialists. Where a few years ago the average manufacturer hesitated to admit that any essential part of his product was not fabricated completely under his own roof, he now points with pride to the reputation of the individual units which he builds into his product. He realizes that sufficient credit is due him as a manufacturer for the proper selection and adaptation of the parts he uses, and that, if the service to the ultimate user is improved by whatever means, this improved service at once justifies those means by which it is attained. cialized unit should be left to the care of specialists. those means by which it is attained.

Coming from this abstract principle to a concrete instance, it is interesting to note to what an unusual extent the manufacturers of the leading marine motors have turned their reverse gear problems over to the Paragon Gear Works, of Taunton, Mass., makers of the Paragon reverse gears. With several other successful and well known gears on the market, it is notable that the Paragon is the one regularly used on practically all the prominent makes of engines, being standard equipment on some thirty or forty different makes of marine motors and also used frequently on most of the other engines.

Until the past few seasons the reverse gear was generally considered as a mechanism wholly separate from the motor. But from a practical standpoint the gear is as much a part of the motor as the crankshaft or any other vital part. Any failure in the gear would naturally incapacitate the entire motor for service, so that motor manufacturers now give their utmost attention to the selection and installation of the gear, and this is usually built in as an integral part of the unit power plant. And of course the motor manufacturer has facilities for testing that are denied the individual purely says. vidual purchaser. He must know that his gear installation is as near perfection as he can attain before he permits it to pass into the hands of his customers.

That the modern motor boat or a reverse gear is as obvious as that bile needs a set of brakes, or a reverse speed in the transmission. marine reverse gear does for the just what the brakes, clutch and ion combined do for the motor car. pensable for the safe and precise the boat. It is insurance against in making a landing or against accidents in the sudden emergencies encountered in navigation.

Paragon gears are now made in several different types and in sizes to transmit from four horsepower per hundred R.P.M. up to sixty horsepower or more per hundred

The enclosed type Paragon is a real enclosed reverse gear, with its housing forming a part of the opcrating mechanism. No oil can escape from the case, while bilge water and brine cannot get in to rust the parts and cause trouble. Wing nuts make the cover easy to remove for inspection or adjustment

The slide-operating type Paragon shown above is probably in greater use than any other model of this or any other reverse gear. A special speed type gear is also

manufactured

cruiser needs

an automo-

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In fact the motor boat

transmis-

It is indis-

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misjudgment

R.P.M. This range meets the requirements of practically every size of pleasure boat and commercial boat engine in use to-day. And the factor of safety allowed in the design is such that each Paragon may be expected to safely carry an overload as high as 100% in excess of its rated capacity. They are built to last for the life of the motors on which they are installed.

Every Paragon gear has a patented self-centering, nondragging type of multiple dise clutch, always a cardinal point in Paragon con-struction. It is well known that the multiple dise clutch provides the greatest area of friction surface possible to secure in a compact device, there-

by insuring a

smooth gradual engagement, and at the same time a positive drive that carry great power without slipping. The adjustment of this clutch is so simple that the boat owner can easily change it in a few moments to offset the inevitable effects of wear.

An X-ray view of a Paragon gear which shows the construction in detail

On the forward drive the friction discs are locked together, and the whole gear revolves as a solid coupling. In the neutral position the friction discs are released, allowing the engine to run free without dragging the propel-ler or turning any of the pinions inside the gear. On the reverse the brake band is clamped to the case and the power is transmitted through four 35-point carbon special gear steel pinions, machine planed, bronze bushed, supported at both ends and located at equal distances around the engine gear, which is also supported at both ends. This construc-tion avoids all shaft vibration on the reverse drive. It is stated that this is the only gear using the direct line drive on the reverse.

The Paragon people maintain a service department at their Taunton factory to advise individual boat owners as well as motor manufacturers about the size and type of gear best adapted for any particular motor. Upon receipt of information regarding the

type of motor, horsepower, number of cylinders, bore and stroke, R.P.M., and the style of boat in which it is to be used, they are prepared to recommend a gear which they will guarantee will give complete satisfaction.-Advertisement.



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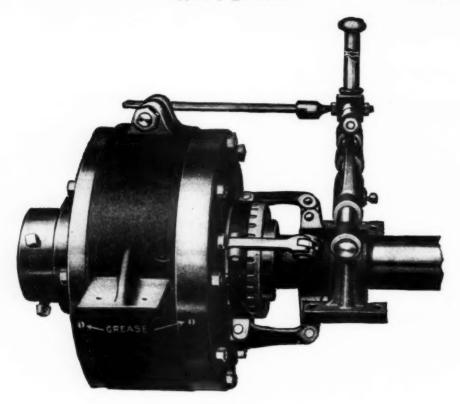
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Joes Famous Reverse Gears

Full Production Resumed on Present Models and Plans Under Way for Building a New Large Reverse Gear for Big Commercial Motors

THE Snow & Petrelli Mfg. Co., of New Haven, Conn., pioneer manufacturers of reverse gears, safety rear starters, etc., report that they have practically completed their war contracts and are prepared to take up anew the ever-growing problems of marine motor transmission, problems that are becoming rapidly more vital to the manufacturers and users of marine motors.

Time was when a reversing gear was looked upon as a matter of minor importance, but the fact has now been forced home to boat owners that the reverse gear is not only of prime importance but is a most vital part of their equipment. Time was, and not very long ago, when the reverse gear manufacturer was obliged to produce the strongest possible gear to occupy the least possible space, have the least possible weight and cost the least possible price. So far as lightness and strength in small compass is concerned, these qualities are still essential for high speed motors, especially if used in speed boats, and to only a slightly less degree for the high speed and medium speed motors used on cruisers, runabouts and pleasure boats generally.

Conditions brought about by the recent great increase in the production of work boat motors, particularly of the big heavy duty fuel oil type, has created a new demand for big heavy gears capable of not only transmitting the power, but capable of withstanding all kinds of rough usage and with a durability on a par with the motor itself. As one motor manufacturer puts it, "We want a gear equal in every respect to our motors and we are producing motors for work boats as good as can be made from the best of materials and the highest class workmanship." Other motor manufacturers are making motors perhaps less refined, but highly practical for the fishing and work boat trade who demand reliable gears at lower prices.

Reasoning from these standpoints, the manufacturers of Joes Gears conclude that no single type of gear can cover the entire field and are therefore making preparation to meet the demand for heavy duty gears capable of transmitting 50 to 75 horsepower per 100 revolutions per minute and of grades suited to the needs of the different classes of heavy duty motors.

At the present time Joes Duplex Drive Gear rated to transmit 25 horsepower per 100 revolutions per minute and weighing about 850 lbs. is their largest stock size and this type of gear has been found very practical for motors of all types. They are being used on heavy duty motors up to 100 horsepower at 300 revolutions per minute and on high speed motors running up to nearly 2,000 revolutions per minute, rated at 400 horsepower.

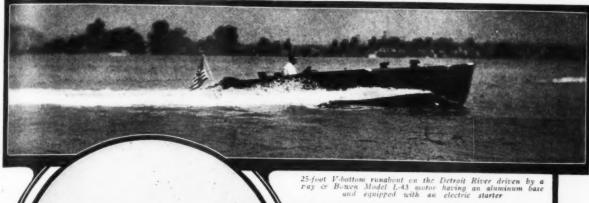
The Gold Cup winner of the past season, Miss Detroit III, was driven by a 12-cylinder 5-inch bore by 7-inch stroke aeroplane motor equipped with a Joes Duplex Drive Gear, only 9½ inches in diameter and weighing only about 165 lbs. Mr. Smith, of the C. C. Smith Boat Co., of Algonac, Mich., wrote the makers of the gear at the end-of the racing season, "We have never had a minute's trouble with the reverse gear."

This company announces that it is in position to furnish High Power and Duplex Drive Gears in all stock sizes with promptness and expects to be in position in a short time to execute orders for gears capable of transmitting up to 50 or 75 horsepower per 100 revolutions per minute. Joes Gears all have 80 per cent or more reverse speed.

A complete catalog of Joes reversing gears, one-way clutches, safety rear starters, etc., will be mailed upon receipt of request by the Snow & Petrelli Mfg. Co., New Haven, Conn.—Advertisement.

919

A Boat Building Establishment for All Kinds of Craft The Fay & Bowen Engine Co. of Geneva, N. Y. Prepared to Make Deliveries on Time



Bowen engine drives this attractive 40-foot erniser through the waters around Atlantic City



Bonita, a 26-footer powered with a 17-25 h.p. Fay & Bowen engine and turning a 20-x 18-inch wheel at 930 r.p.m., makes a speed of 11½ m.p.h.



the many service boats in commission along the West This particular boat is powered with an L43 Model Fay & Bowen engine



A handsome runabout fowered with a Fay & Bowen Engine and operating on Seneca Lake



A view of the Fay & Bowen factory building showing the canal front only-Advertisement

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ATWATER KENT SCIENTIFIC IGNITION



ATWATER KENT EQUIPPED MILITARY TYPE EXPRESS CRUISER "GITANA"

THOUSANDS of the Motor Boat Fleet that did yeomen service in the great war were Atwater Kent equipped.

It was essential that ignition systems be dependable, simple, unfailing. The record of these boats forms a chapter of service unmatched in the annals of sustained performance.

Atwater Kent Type H System will operate efficiently on marine motors, either from dry batteries (a season's operation from a set of six), a separate storage battery or a storage battery generator charged. Furnished for 1-, 2-, 3-, 4-, 6- and 8-cylinder motors.



Type H, on Magneto Base Particularly adapted to marine motor use

ATWATER KENT MFG.WORKS Philadelphia

SEE YOUR DEALER OR WRITE FOR INFORMATION TO 4926 STENTON AVENUE

For Medium Heavy Duty

FOR those who require a power plant for use in a good sized cruiser or commercial boat we recommend our 40 H.P. plant as illustrated on this page.

This engine delivers a full 40 H.P. at 825 R.P.M. or 46 H.P. at 1000 R.P.M. It does this consistently, day in and day out. It is always on the job ready for any service no matter how severe.

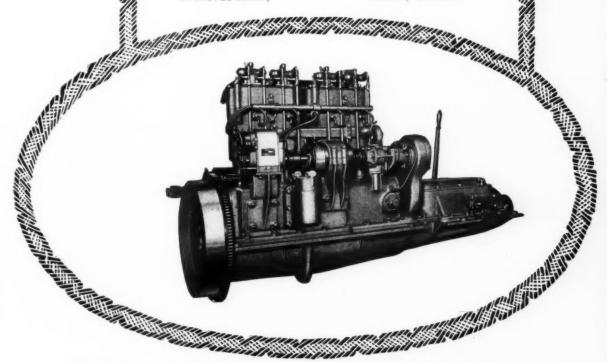
It is delivered completely equipped with double ignition reverse gear and electric starter. Kerosene attachment will be furnished if desired.

This special Knox Motor is the very best buy of its kind. Everything put into it is the best that we are able to secure at any price—there is no stint either in the quality of material or workmanship.

Early deliveries for Spring installations. Shall we send you power curve and detailed description?

Send for information to-day.

KNOX MOTORS ASSOCIATES
SPRINGFIELD, MASS., U. S. A.



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Reliability

It goes without saying that reliability is an index of character which affords the greatest assurance to all who are called upon to test it whether it resides in a trusted friend or in a vital piece of mechanism.

The best boat and the best motor in the world will not get you anywhere if there is a weak or unreliable reverse gear connecting the motor to the propeller. The time has passed when a reverse gear can be regarded as of secondary importance, for it is both necessary and of prime importance, but an unreliable gear is worse than none.

JOES Heavy Duty Duplex Drive Gear is reliability itself

Snow & Petrelli Mfg. Co.
New Haven Conn., U.S.A.

Manufacturers of JOES Reverse Gears, Safety Rear Starters, Oneway Clutches, etc.

Agents
J. King & Co., 10 Church Row, Limehouse, E. London, Eng.; L. H. Coolidge Co., Seattle, Wash.; Wood, Vallance & Leggat, Vancouver, B. C.; A. R. Williams Mchy. Co., Toronto; W. E. Gochenaur, 631 Arch Street, Philadelphia, Pa.; Sutter Brothers, 50 Church Street, New York, N. Y., Service Station foot of East 22nd Street, Brooklyn, New York; A. G. Hebgen, 436 Market Street, San Francisco, California.

REVERSE GEARS

Efficiency

After Reliability in a reverse gear must come high grade efficiency without which its usefulness is seriously limited. Here then are some of the strong points that make for efficiency in JOES DUPLEX DRIVE GEARS, they combine strength, durability, high class materials and workmanship.

In addition to this they have a very high ratio of reverse speed, which is of the highest importance where quick and effective control is required, and is imperative for slow running work boat motors.

Send for Complete Catalog



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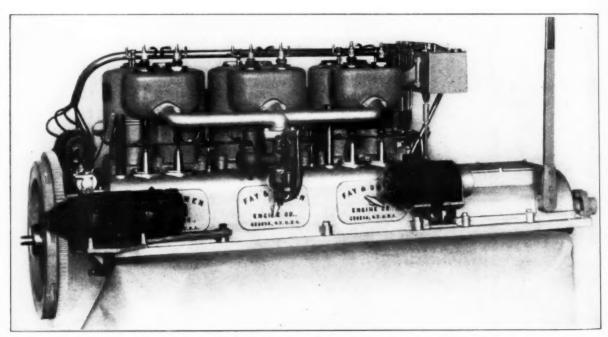
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MODEL L-40, four cylinder enbloc, 17 H. P.

EFFICIENT—DEPENDABLE—DURABLE

18 continuous years of successful engine building experience back of each and every engine leaving our factory.



MODEL L-64, six-cylinder, 45-75 H. P.

FAY & BOWEN ENGINE COMPANY

104 LAKE STREET

GENEVA, N.Y., U.S.A.

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BOSTON, 11 Haverhill St., Louis T. Carey

Built for Canada by ST. LAWRENCE ENGINE CO., LTD., BROCKVILLE, ONT.

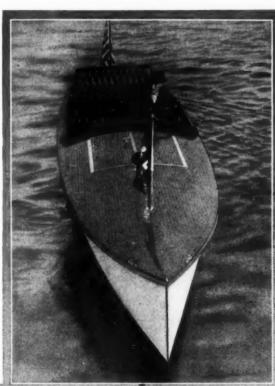
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SPEEDY

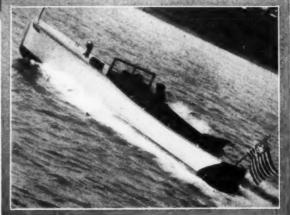
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The Revival of Pleasure Boating

The longing for pleasant days on the water is already evident among thousands of boatmen-the rapid transition from war to peace brings the immediate desire to return to the game.

This summer will be a happy one for those who appreciate the joy of the open water and in a month or so the yards will be filled with enthusiasts fixing up for the grand opening.

Is your engine right? Don't let this greatest of all boating periods be spoiled because your power plant gives constant trouble. Install a Kermath in your boat and know the joys of boating as and when you like with a sure knowledge of the performance your motor will give you. give you.

Join the thousands of satisfied Kermath owners who get a service that is consistently satisfactory regardless of conditions.

Send for the Kermath book on engines to-day.

KERMATH MFG. COMPANY

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MICHIGAN

"America's Standard 4-Cylinder Engine"

The Work Boat Comes Into Its Own

War is a terrible thing-and yet out of the maelstrom there comes many contributions to human progress. History shows that this is a true fact.

One of the lessons we have learned from the greatest of all wars is the unlimited possibility for development in boats and engines for commercial use.

The Kermath plant has learned its lesson well and never before have we been in a better position to furnish power plants for heavy duty work. During the war 95% of our efforts were devoted to exacting work for the Government—our increased facilities are now ready for those who require commercial engines for hard and continuous duty.

We have an interesting story to tell-may we tell it?

KERMATH MFG. COMPANY

DETROIT. Dep't 2 MICHIGAN





SPEEDWAY CRUISER Length, 52'; Beam, 11'4"; Draft, 3'0". 4 cylinder 75 H.P. Speedway Motor. Speed, 14 miles per hour.

CRUISER

An ideal motor yacht of moderate size, splendidly built and equipped. Equally well adapted for coastwise cruising and inland sailing. Comfortable accommodations with Owner's private stateroom, dining saloon and liveable crew's quarters. An exceptionally able and attractive appearing craft.

A New Model

"A motor proven to be remarkably efficient"
Our Model "M" Speedway motor is built in four, six and eight cylinder units. We are, therefore, prepared to meet the demands of those who desire additional speed.

Gas Engine & Power Company

and

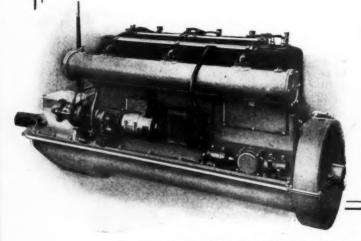
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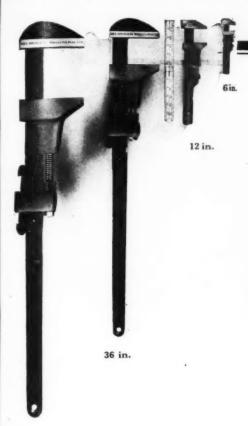
Consolidated

MORRIS HEIGHTS

NEW YORK

U.S.A.





Coes Wrenches Are Good Wrenches—

That is more than an advertising statement. We manufacture a complete line of reliable wrenches to meet the insistent demand for tools of exceptional quality. We believe that the service given by a good wrench more than offsets the difference in price between the excellent and inferior. Boatmen especially should realize this fact—the need for really good tools is never more apparent than when a breakdown occurs miles from shore.

These all steel models of *Coes Wrenches* have no wooden handle to swell by contact with water and are as near waterproof as can be made.

48 in.

AWrench for Every Need

Coes Wrenches are made in a wide variety of sizes and styles. Our line of Screw Wrenches run from 6" to 48" long—there is a size suitable for any requirement in manufacturing or repairing. Many of our smaller sizes are in wide demand among motor boating enthusiasts who make their own repairs and adjustments.

We will be very glad to mail you the Coes Catalog. Send for it to-day.

COES WRENCH CO.

Worcester

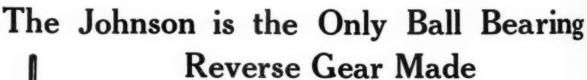
Mass.



THE JOHNSON MARINE REVERSE GEAR

Ball Bearings Help Make a Better Reverse Gear

Ball bearings have contributed more to the easy running of all kinds of machinery than any other one agency. There is no question of the truth of this statement — every engineer is aware of the advantage in the use of ball bearings.





Exterior.



Interior.



Cover raised

The use of ball bearings is an exclusive feature found only in the Johnson Marine Reverse Gear. And because of this feature it is selected by the majority of boat owners and engine builders.

Still another distinctive feature found in our product is the Johnson Friction Clutch which transmits the power. Many of the machines used in the larger manufacturing plants are equipped with this trouble-proof Clutch.

Nothing but the finest of material is used in the making of the Johnson Marine Reverse Gear and this is one of the reasons it is selected by such reliable builders as Evinrude, Frisbie, Koban, Lockwood-Ash and Sears Roebuck Company.

Make Your Boat Safe

You must have a good reverse gear if you want to keep the element of safety in boating as high as possible. If you will send us the size of your boat and engine we will suggest the proper gear for your use. Write to-day to department 25.

THE CARLYLE JOHNSON MACHINE CO. MANCHESTER CONN

919

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luse ners

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Cruisers and Work Boats

GRAY-PRIOR Marine Engines are truly "Built up to a Standard-not Down to a The Model D-4 illustrated is not to be compared with the ordinary marine Here is quality throughout. Every part of it is made from material of the engine. finest kind and none but the most skilled craftsmen have taken part in its making.

Anyone who possesses a knowledge of marine engines will see in the brief specifications below, a power plant of more than usual worth. It is especially designed for heavy cruisers and work boats. It will pay you to investigate this engine before placing your order elsewhere.

SPECIFICATIONS

CYLINDERS-L head, with detachable heads. Bore 41/2 inches. Stroke 8 in.

CRANKCASE—Large removable side plates in each side of upper half for convenience and accessibility. Sight glasses cover the hand holes, permitting observations while the engine is in operation. CRANKSHAFT—40-point carbon steel, heat treated and ground to exact size. Main bearings 2% inches in diameter. End bearing 5 inches long. Much larger and stronger than usually found in an engine of this size.

CAM SHAFT—Runs in a bath of lubricating oil. Entire cam shaft can be removed as a unit without dismantling the engine.

IGNITION—Two complete independent systems. High tension gear driven magneto, also battery with Connecticut coil and distributor. Separate set of spark plugs for each system.

LUBRICATION—Pressure feed to all working parts and bearings, including the reverse gear.

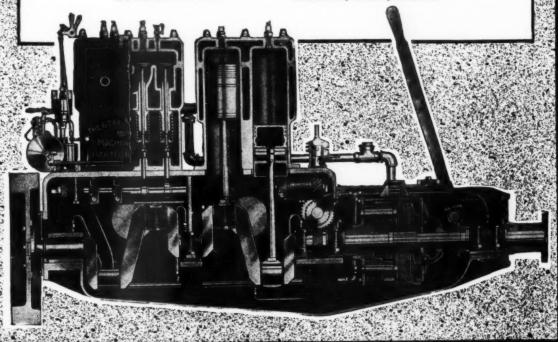
REVERSE GEAR—Planetary spur gear type with multiple disc clutch, large and easily adjusted. All gears and pinions made from solid steel blanks, heat treated and heavily case hardened. Same propeller speed on reverse as forward.

AIR COMPRESSOR-and bilge pump built in on engine.

Every GRAY-PRIOR engine is equipped with bronze fittings whether for salt or fresh water service. May be furnished to run in either direction for twin screw boats. We also manufacture the famous May be furnished to run in either un. HARTFORD two-cycle power plant.

Write for catalog and full information

GRAY & PRIOR MACHINE COMPANY 56 Suffield Street Hartford, Conn., U.S.A.



The

friendly motor

Overhead valves open directly into combustion chambers. The full im-pulse hits squarely on top of the pistons. No

pockets or crevices to

gather carbon and waste fuel. Compared with the L or T-Head, this design

develops

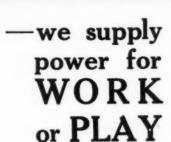
to 20%

15%

More

Power

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DEMAND what you will in a medium-duty motorfor fishing boat, gravel scow, dory, cruiser or racer-you will get it in the Frisbie Motor.

And the Frisbie Motor certainly puts delight in a motor boater's life. Jump into your boat and turn her over. She "grips" the load with a brawny tug and breaks into a pleasant, busy hum of energy that's good for all day, work or

Many hundreds of owners have quit experimenting and installed the Frisbie, simply because of the utter constancy, low fuel rate, and negligible repair cost.

5 to 75 H.P.

Frisbie Motors are made in these sizes: 1-cyl., 5 and 7 H.P.; 2-cyl., 10 and 16 H.P.; 3-cyl., 18 and 25 H.P.; 4-cyl., 30 and 40 H.P.; 6-cyl., 50 and 75 H.P. Bore and stroke, 434 x 5, and 6 x 6. Then,

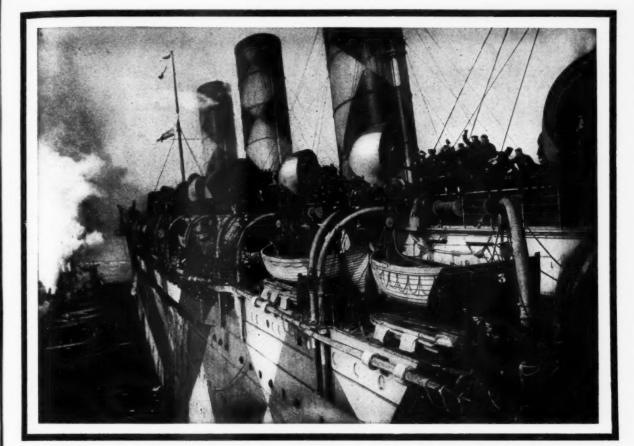
Frisbie Kerosene Motor

which burns kerosene or gasolene, or any mixture. No carbon troubles, no odor. Lubrication, excellent. A guaranteed success. One ran the entire Frisbie factory for two years!

Send for Literature Showing the Complete Line.

THE FRISBIE MOTOR CO., Lower College St., Middletown, Conn.

19



Their Job Is Done They're Coming Back!

The Sailors and Soldiers of 1917-19 are going to be the Yachtsmen of 1919,—more of them than ever before.

Old boats are going to be remodeled—new boats are going to be built,—old Yachtsmen and new are going to combine to make 1919 stand out big in yachting history.

Our Business Is Marine Supplies

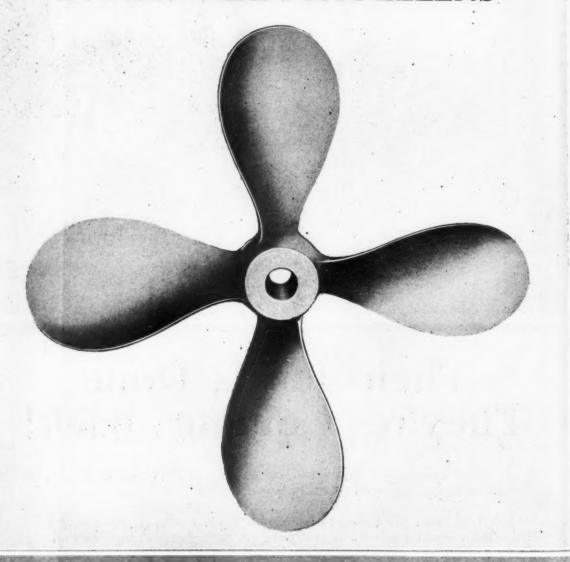
If you are one of those who believe in *preparedness* you will send now for our big catalog and lay your course for the Big Season ahead.

GEO.B. CARPENTER & CO.

200 W. Austin Avenue

Chicago, Ill.

COLUMBIAN BIG BRONZE PROPELLERS



The well-earned reputation of the Columbian Propeller for Motor Boats has done much to open up the field of Big Bronze Propellers for the Columbian Bronze Corporation. So successful have been the initial Big Bronze Propellers shipt from our Freeport factory that we have decided to manufacture a complete line of Standardized Big Bronze Propellers, just as we do a complete line of Motor Boat Propellers—thus completing our line and making it possible for us to fill practically every propeller order offered us, from the smallest wheel to the biggest.

YOUR BOAT WILL BE A BETTER BOAT IF EQUIPT WITH COLUMBIAN PROPELLERS.

Columbian Bronze Corporation

Executive Offices: 50 Church Street, New York City

New York City Local Salesroom: Concourse, 50 Church St., Factory, Freeport, L. l. Address all correspondence to the Executive Offices except for New York City Sales

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Why the Berling Magneto makes a motor boat worth more

A Berling sparks the Van Blerck Motor on the Mayflower's Tender.

The Berling Magneto is standard ignition on most of the best motors including Van Blerck.

The boat pictured above, is the motor-tender of the Presidential yacht, the Mayfower. It was designed and built by the Albay Boat Corporation. Its 8-cylindered Van Blerck motor is sparked by a Berling Magneto.

eld Big line omthe THERE are few harder tests of a magneto's quality and dependability than its use on a marine motor. And because the Van Blerck Motor Co. had set such high standards for the power, speed and reliability of their marine motors, they demanded a magneto which would be:

First: Entirely waterproof

Second: Possessed of a hot, fat spark

Third: Absolutely dependable

The Berling was proven by their tests to possess every one of these essentials. Therefore, the Berling is standard equipment on Van Blerck marine engines.

ERICSSON MANUFACTURING CO. BUFFALO, N. Y.

Berling Magneto WORTH MORE DOES OF MORE

"Mullins Boats" Means "Can't Sink"

Equipped with air chambers fore and aft like a lifeboat. Built of punctureproof steel plates like a torpedo boat. All the bouyancy of a wooden boat with none of its faults—can't leak, warp, waterlog or open at the seams. More than 60,000 in use.

Write for our big catalog showing 40 models of power boats, rowboats and canoes in steel and wood.

The W. H. MULLINS CO. 83 Franklin St. Salem, Ohio

Mullins Twenty-foot Auto Boat

Mullins Fourteen-foot Outboard Special

Mullins Eighteen-foot Leader Launch

Mulling Coder Canvas Covered Cance Charles River Mode

MULLINS STEEL BOATS CAN'T SINK

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MARINE HARDWARE

YACHTS MOPS and BROOMS

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ANDRADE'S WINDLASSES

EELLS' and CRESCENT **ANCHORS**

McKENZIE CHAIN CLAMPS

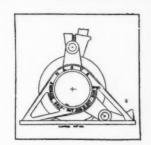
MOTOR BOAT and YACHT SPECIALTIES

HARDWARE Trade FOR



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We Cordially Invite All Visitors to New York TO NUMBER TWO SOUTH STREET

> TO LOOK OVER THE MANY INTERESTING THINGS ON DISPLAY AND WHILE THERE WE WILL FULLY EXPLAIN

THE SPECIAL FEATURES

OF THE

Eells' Stockless Anchor

AND THE NEW

Andrade Grip Windlass

(cuts of which we show above)

CHAS. DURKEE & CO. TELEGRAPHS

MANUFACTURERS OF

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MECHANICAL **FOG HORNS**

TREENAILS and other TURNED WOOD PRODUCTS

SHIPS

BINNACLES

DECK SUPPLIES



This shows our factory, Grasmere, Staten Island, New York City in 1915, since which time, it has been enlarged to ten times the size of original plant.





Use Business Methods in Buying Your **Boat Engine**

Get this book and learn all about Power Boat Engines

Bristling with valuable suggestions and interesting information, this book contains the very essence of what you must know to buy your boat engine intelligently.

The book describes and pictures the complete line of Lanches, cruisers, work-boats, etc. It gives you comprehensive knowledge of the size and power of engine for your boat. And it offers timely advice to aid you in your selection.

If you plan purchasing an engine, or can use this book merely for comparative purposes, send for it at once. Clip and mail the coupon below-now!

There's an A Engine for every size boat.

Ranging from the portable 1 cylinder, 2 h.p. outboard engine to the big 4 cylinder, 20 h.p. inboard motor, the A line is complete and embodies throughout the same fine workmanship and skillful engineering.

Built to an ideal of simplicity, strength and durability & Engines have stood the test of

They are beautifully clean and compact in their lines, easy to understand and readily accessible in all parts. They accurately meet the requirements of the man who demands a thoroughly dependable power plant for pleasure or work boat. Five well-known engineers selected LA Engines because they proved \mathcal{L} superior ability. The 30 Days' Trial Plan gives you a generous opportunity to determine \mathcal{L} performance before you decide.

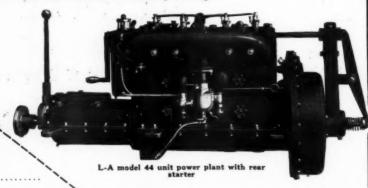
LOCKWOOD ASH-MOTOR CO.

1901 Horton Avenue-Jackson, Michigan

Lockwood-Ash Motor Co.

1901 Horton Avenue Jackson, Michigan

Please mail me a copy of your book that will give me information on the construction and operation of marine motors.





A WHEEL FOR EVERY NEED

The manufacture of quality propeller wheels is one of the most important phases that has contributed to the success of our organization. The famous Michigan Speed Propeller Wheel has earned for us a reputation that we are proud of. In boating circles everywhere Michigan Propellers are acknowledged as supreme in design, quality, finish and performance.

We are to-day the oldest manufacturers of speed propeller wheels. We supply over half the engine and boat builders with them. Our factory is a model of superior equipment and our workmen are trained mechanics who understand the necessity for accuracy in each process of manufacture.

Michigan Speed Propeller Wheels are selected by those who know because its record is one of continual satisfaction. Our big volume of business depends largely on the many repair orders that reach us constantly from pleased customers. Our shipping facilities are the best and we can promise prompt deliveries always.

Send for our new big catalog to-day

MICHIGAN WHEEL COMPANY

C. J. LITSCHER, President

UNIVERSAL JOINTS, COUPLINGS, THRUST AND STERN
BEARINGS, BALL RACES, MOTOR BOAT ACCESSORIES

GRAND RAPIDS, 1200 Monroe Ave. MICHIGAN



Michigan Three Blades Reversible Propeller Wheel

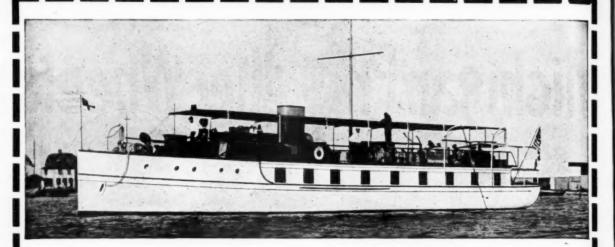
Those who use the one-way motor boat are the first to realize the advantages of the reversing propeller. Every advantage of the reverse gear yet it takes up no room in the boat. It increases the factor of safety in boating and saves time and trouble in many ways.



Michigan Weedless Speed Propeller Wheel

This wheel will be appreciated by hunters and others who navigate shallow waters filled with weeds. This propeller opens up to many boatmen countless lakes and ponds that would be impassable. It is easily attached to any shaft and with the addition of a weedless rudder increases boating possibilities in a large measure.

MR. BOAT OWNER AND DEALER, YOU WILL FIND OUR LINE MOST COMPLETE. EVERY ARTICLE LISTED IN OUR CATALOG HAS STOOD THE TEST OF TIME.

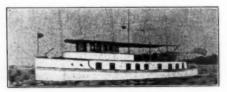


Mathis-Built Houseboats

are the final words in houseboat planning and houseboat construction. There's a reason for their predominance in Florida waters this season—as in every preceding season since 1910.

There's a reason why Mathis-Built Houseboats are the choice of men who know, like L. H. & A. W. Armour and James Deering of Chicago; like A. P. Ordway, Murray Guggenheim, H. N. Baruch, George W. Perkins, Arthur Curtis James, W. J. Matheson, Henry W. Savage and others.

That reason is found in the Mathis planning which has developed the most efficient houseboats and semi-houseboats of every size from 40 to 120 ft. Which has produced the highest combination of comfort with yachtiness, of roominess with seaworthiness, of greater touring radius with decreased touring costs.



70-ft. LANAI

built by us and sold in 1911 through Messrs. Tams, Lemoine & Crane to Ex-Com. A. C. James, of the New York Yacht Club. A boat that proved its sturdiness on its maiden trip south, despite ice floes and storms at sea. And combined with this, the experience, technical skill and unsurpassed equipment which has been built only through long years of specializing.

If interested in a houseboat or semi-houseboat, write us.

If you are having a new cruiser designed, it will pay to get our estimate.

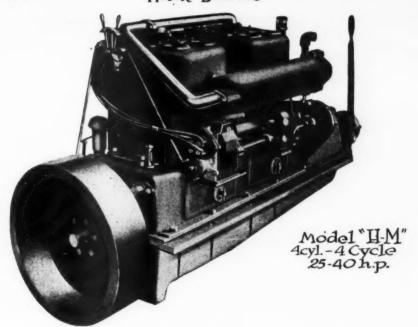
Mathis Yacht Building Co.

Specialists in Houseboats and Cruisers from 40 to 120 ft.

COOPER'S POINT

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CAMDEN, N. J.



An Engine Of Exceptional Merit

This is our new Model "H.M" DOMAN-a motor without equal in sturdy, dependable construction, reliable and economical operation.

Designed Right Made Right Runs Right Looks Right

It's a medium duty power plant particularly adaptable to small cruisers, work boats, runabouts, etc.

As illustrated, Model "H.M." is complete in every detail-she's all ready to connect up to the propeller shaft without another thing to buy.

And as to complete accessibility there is no motor that can beat her.

We have just published a new bulletin that describes this motor in detail—gives specifications and instructions. Write for a copy.

H. C. DOMAN CO.

OSHKOSH,

WIS.

Fish Boat Engine

This is a real wonder for power, reliability and

economy. Burns INGLE

gasoline or 3 Blade wheel Turns a over 600 r.p.m. in a 28foot Columbian River Fish Boat and then slows down to trolling speed.

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Baldridge.

Reverse Gear

Practically every boatman decides sooner or later that his motor must be equipped with a reverse gear. Safety and convenience require reverse gear installation. Absolute control is always necessary on board boat. Navigation in many cases requires instant action—the ability to make a quick reverse may save lives.

The Right Gear for Any Boat

The **Baldridge** Reverse Gear is the result of many years experience and endeavor. It is "the right gear for any boat", regardless of its type.

The **Baldridge** revolves in a continual bath of oil and wear is reduced in this manner to a minimum. It is all enclosed so that grease and oil is kept in the gear where it belongs—your boat is kept free from spots and water cannot get in to rust the metal.

A special Baldridge feature is the unbroken mainshaft, supported by large, long bearings at both ends. This is the only type of shaft that can't get out of alignment.

Baldridge Reverse Gears are in use wherever boats are built or used. They have given satisfactory service to hundreds of owners for many years.

"For the Man in the Boat"-FREE

This book tells you an interesting story about reverse gear equipment. We'll be glad to send it to you.

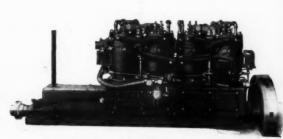






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4-Cycle Overhead Valve Heavy Duty 50 H.P. Model

HEAVY DUTY

ENRY CLAY said that he'd rather be right than President. The integrity of this famous statesman endeared him to the hearts of the people at large and eliminated whatever political barriers that may have existed.

Our policy as the builders of HONEST CLAY Marine Engines may be thus described. We would rather build One engine a year and have it RIGHT than to build 5,000 of questionable construction in view of profits.

The HONEST CLAY isn't camouflaged in any detail—a simpler, more economical, flexible or accessible engine isn't to be had at any price. Years of careful development has brought it above the ordinary class of 4-cycle marine motors; all parts interchangeable and carried in stock by us for immediate replacements if ever necessary; all nuts, bolts, studs, etc., of standard thread and can be purchased at any hardware store or blacksmith shop. Speed controlled from maximum high down to as low as 75 r.p.m. without carburetor adjustment.

REORGANIZATION

Now that we are in full operation in our greatly enlarged plant with 5 times our former equipment and facilities, we are ready to make immediate shipments of all orders. Send for complete information on HONEST CLAY Engines—built in all sizes from 4 hp. single-cylinder to 100 hp. 4-cylinder.

AGENTS WANTED EVERYWHERE

Protection guaranteed-unusual proposition that will bring satisfactory results. Write.

Single Cylinder Engines 4-6-8-10 H.P. Two Cylinder Engines 8-12-16-20-25-30-40-50 H.P. Four Cylinder Engines 25-35-50-80-100 H.P.

Can be operated on Gasoline-Kerosene Distillate or in connection with producer gas.

HONEST CLAY Engines are moderate in price, but you cannot secure as reliable an engine or one that will give the complete satisfaction, even though you pay much more for one of another make.

THE CLAY ENGINE MFG. CO.

664 East 72d St. CLEVELAND, OHIO, U. S. A.



By repeated competitive tests the Universal Safety Suit has been proved infinitely superior to every other life preserver and suit. No matter how long you are in the water it will keep you safe, warm, dry and comfortable until help arrives or you reach land. It is the only safe appliance for those who must risk the dangers of water travel.

It is a perfect protection against cold and discomfort under any conditions—to wear on deck in bad weather, for passengers and navigating officers during a storm, for captains on the Great Lakes, Arctic Explorers, Alaskan prospectors, hunters, fishermen, for under-water work about a motor boat, etc. Its uses are manifold. The padding is especially arranged to protect the spine and vital organs from cold.

The Universal is made of rubberized material that is soft and pliable, permitting freedom of movement at all times. Either single or double texture material, with or without weighted soles.

A lining of downy Kapoc insures complete buoyancy—this material is specified for use on transports by the Government. The buoyancy is not affected by water and no air cells are used. You can swim or float in the Universal—you could actually sleep in the water safely. It is the only suit or life preserver in which one can safely rest in the water in a reclining position. Made for men, women and children—requires little storage space and is very light. It is the most efficient life preserver on the market to-day.



is a favorite among motor boatmen who require some means of safety that can be worn while working aboard boat. It is as light and warm as a reefer and does not hamper movement to any degree. The buoyancy is sufficient to float several fully clothed persons for an indefinite period and there are no air cells to be punctured. You could not drown in this jacket because there is enough buoyancy in the collar to keep your head afloat even if you should be unconscious.

The Bailey-type Masten Life Jacket is an improved and patented design which is both adjustable and reversible. Any way you put it on is the right way—no delay in emergencies. Fits any size person—man, woman or child. Simplest, most practical and fool proof life preserver ever devised.

Masten Life Preserver Jackets are approved by the Government and are in use on transports and naval vessels. They are the ideal Life Preservers for active motor boatmen.



We guarantee satisfaction or refund your money on either Universal Safety Suits or Masten Life Jackets. Write at once for details and prices of the Universal Safety Suit and the Masten Life Preserver Jackets. We also manufacture motor boat tops, sprayhoods, life preserver cushions, life rafts, swimming belts, etc.

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The Lawrence Patent Process

The patented process used in our workshops is so superior that it is impossible for even an expert to distinguish restored cylinders from new ones. We defy anyone to disprove the truth of this statement.



Briefly the process is this: Our skilled mechanics electrically fuse a silver nickel alloy into scores and defects in the metal and then refinish the cylinder as good as new. The restoration of perfect compression is the result—the bore is not altered and the standard piston fits to perfection. The process is inexpensive and cylinders repaired by the Lawrence method will be just as good as new ones.

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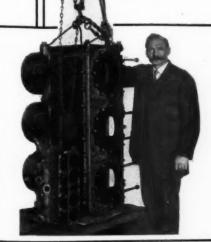
In sending your marine or automobile engine to us for repairs you assume no risk because we back our workmanship with an unqualified guarantee. This guarantee is all inclusive—every job is absolutely guaranteed for the life of the motor. We have never yet been called upon to make good. Prominent boat owners, motorists and en-

gineers throughout the United States have been as one in their expression of the good results obtained by the Lawrence Patent Process. And there must be some good reason for the fact that most of the leading marine and automobile power plant builders send much of their work to us.

Send to our nearest service plant for information and prices, mentioning the size of your cylinders and the character of the defects. And now is the time to do this—before your boat goes over in the spring.

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Samples of Our Work

This photograph illustrates the character of work every Lawrence plant is equipped to handle. The smaller cylinder block is an automobile job; the larger one a typical example of some of the massive pieces of work we are called upon to repair. Results are uniformly good regardless of size or shape.

The Lawrence Company has just applied for an injunction against the Trindl Machine Works for infringing on the Lorentowicz patents under which we operate. We were recently awarded \$10,000 damages from the E. Borman Corporation for a like offense. Our rights as owners of the Lorentowicz patents will be vigorously maintained.

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Approved

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Obenberger Forgings have for many years been the standard by which other forgings are judged.

The Symbol of Better Forgings

Marine engine manufacturers who desire to maintain consistent superiority for their products should investigate the reasons for Obenberger supremacy.

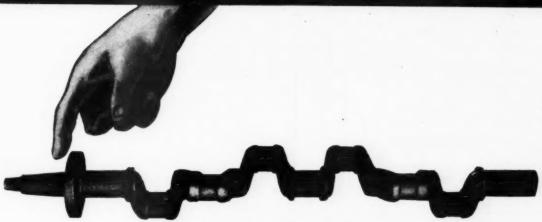
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For factory locking equipment use a Yale Master-Key System. Write for particulars

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Submarine Chasing

(Continued from page 10)

bearing. You wonder how he knows when he is there. Well, he knows the distance, and with the distance and the speed he is running, he runs his finger down the "Swann Speed Table" and sees immediately just how long to run to make good that distance. All ships are given the order to stop and lower their tubes and take another bearing, because the submarine, you must remember, is underway too. The same procedure is continued until the chasers get up to within about 300 yards of the submarine. Then by this time. they have been able to determine the course the submarine is steering, the distance away at the least bearing taken, and the speed of the submarine. They add to the distance of the submarine, the distance she will run between the time they last took their bearings and the time they get underway, and run that distance before letting go of the depth charges. But suppose the sub slows up? Well, they figure on that But suppose the sub slows up? Well, they figure on that too. So to make sure, all three chasers let go a depth charge thirteen seconds before they reach the spot. Then they fire two more from the "Y" gun, which drop fifty yards from the sides of the ship. By now the ships have closed into 200 yards on the attack, so that if the sub turns an area of 600 yards wide on the second attack it will be covered. Thirteen seconds later the third charge is fired. That means each chaser has fired close to a ton of TNT, and the three chasers have covered an area of 600 yards in width, and 200 hundred yards long, and if the submarine was anywhere in the vicinity it would realize that they had found him.

But lots of times, the submarine would stop and lay quiet on the bottom, so the chasers could not hear it. Then the trailers were put over the side. If the water was shallow enough for the sub to lay on the bottom, it was also shallow enough for the chasers to reach the bottom with trailers. The trailer is a device based upon the principle of an immense storage battery. Electrically the indicating trawl consists of the sensitive relay with one terminal connected to a phosphor-bronze wire to be trailed in the sea, and with the other terminal of the relay connected by a ground wire to the copper ground weight also to be trailed in the sea. When, however, the trailing wire comes into contact with the iron body of the submarine or other wholly or partly submerged iron, a battery is formed with sea water as the electrolyte, with the iron as negative electrode, and with all of the submerged copper or phosphor-bronze as the positive electrode. This battery furnishes current which actuates the relay and closes the buzzed circuit in the wheel-house.

The men that operate these chasers feel that they have more than paid the government for the cost, in the many

odd jobs they have performed.

They were always at sea. Ships were being sunk and many survivors have the SC boats to thank that they are still alive. These little boats picked up survivors, went out and exploded mine after mine that was discovered by all manner of ships. Many an aviator, whose luck was bad and machine went wrong, has the SC boats to thank for his life.

So the people that knock the chasers want to talk to some

of the men who ran them. They will find their prophecies "that all they would ever be good for was to be tied up to a dock and patrol between two buoys in some harbor"; turned into answers like this. The SC boats were out on duty at sea more than any other type of boat in the Navy. Their crews were the hardest worked crews in the Navy. The SC boats sank more submarines than all other type of vessels put together. They cost less to operate than any other sca-going vessel the Navy ever had. They proved their worth in battle, they proved it on convoys, as patrol boats, and as rescue ships; but the biggest thing they did was to prove that they could chase the submarines and combat the submarine under any condition.

These boats made trips from Seattle, Wash., via the Panama Canal to New London, Conn., and then from there to the French Coast. It is a fact that these boats did these things, and that they should not only be given credit but a great deal of credit must be given the men that were responsible for their performances. The quarters were small, and the crew was large.

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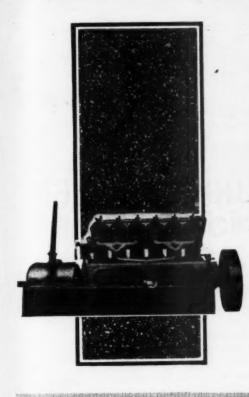
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1919?

What the coming year has in store for American Industry is the question in the mind of every business man. The answer depends entirely upon ourselves.

A forward look and immediate action are necessary. The man that fears radical readjustments and declining prices and selfishly waits to get the full benefit of these will be left behind in the commercial race. If all should do this, it would mean disaster. Fair wages and fair prices mean prosperity. There is an ample market for all our products at their present values. We must translate our belief in the future into purchasing and production if we are to be ready for the rising tide of business.

If we do this and suit our actions to our words there can be no doubt as to the answer of the question—What of 1919? The Automotive Industry proved its ability and patriotism during the War. It now has the opportunity to prove its strength, permanence and commanding position among the Industries of America.

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